Company Name: Apple Inc.

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Academic Institution: Lawrence University

Course Name: BUEN 220 Foundations of Financial Management

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Executive Summary

In the dynamic and challenging environment that has characterized the world since 2020, Apple Inc. has not just adapted; it has emerged as a leader of innovation and growth. During these years, Apple has displayed an exceptional ability to not only navigate but also capitalize on changing market dynamics, thereby affirming its position as a formidable player in the tech industry. This period of transformation underlines Apple's resilience and its capacity to lead the way in technology, making it an attractive prospect for investors seeking both stability and growth. From 2020 to 2022, Apple has demonstrated a remarkable ability to thrive amidst global economic shifts. The company has achieved significant revenue growth, a feat made possible by its successful new iPhone models, which have continued to captivate consumers worldwide. Additionally, Apple's strategic shift toward digital services, such as streaming, cloud storage, and its App Store, has diversified its revenue streams and fortified its market position. Apple's unwavering commitment to research and development, coupled with its ability to consistently deliver innovative products, has ensured a strong, loyal customer base and a competitive edge in the ever-evolving tech landscape.

Critical research and journalistic coverage during this period shed light on Apple's effective strategies in navigating supply chain disruptions, a challenge that has been prevalent across industries. Esteemed publications like Forbes and the Wall Street Journal in 2021 have highlighted Apple's transition to service-based revenue streams, including Apple Music, the App Store, and iCloud, as a strategic masterstroke in ensuring sustained revenue growth. Furthermore, a 2022 report in Environmental Science & Technology lauded Apple for its environmental initiatives, particularly its strides in reducing carbon footprint and embracing renewable energy, thereby meeting the rising consumer and investor demand for environmentally responsible technology companies. Apple's financial results and strategic business moves from 2020 to 2022 paint a picture of a company that is not only prepared for ongoing growth but also poised to redefine industry standards. Its ability to swiftly adapt to market changes and its continuous innovation suggests a robust potential for an increase in stock value. Investing in Apple thus represents a strategic decision, banking on a company that is not only leading in technology but is also setting new benchmarks in ethical business practices and sustainability.

Given the comprehensive analysis of Apple's financial robustness, market leadership, and innovative strategies observed from 2020 to 2022, investing in Apple's stock is a highly recommended move. This recommendation is based on a thorough evaluation of Apple's consistent performance, its strategic business decisions, and its potential for future growth and innovation. An investment in Apple's stock is, therefore, more than a financial decision; it is a commitment to a company that is shaping the future of technology and ethical business practices in a rapidly evolving global landscape. We must remember that Apple stands as a beacon of innovation, resilience, and sustainable growth in the tech industry. Investing in Apple goes beyond achieving financial gains; it represents a strategic choice to support a company that is at the forefront of driving positive change in the world. An investment in Apple is an opportunity to be part of a promising future where technology and ethical responsibility are intertwined, offering both substantial financial returns and the satisfaction of supporting a company committed to making a positive global impact.

Mission & Vision Statements

Mission:

- "To bring the best user experience to customers through innovative hardware, software, and services."

Vision:

- "To make the best products on earth and to leave the world better than we found it."

Goals & Objectives

Goals

- Become the global leader in technology innovation and customer satisfaction, recognized for advancing sustainable and user-centric products.

SMART

- **Specific:** Focuses on leadership in technology innovation and customer satisfaction.
- **Measurable:** Can be assessed through rankings in innovation, customer satisfaction scores, and sustainable practices.
- **Achievable:** Realistic for a company with Apple's resources and record of accomplishment.
- **Relevant:** Aligns with Apple's business in technology and its historical focus on user experience and sustainability.
- **Time-bound:** Set to be achieved by 2025.

Objective Goal 1

- Increase Apple's annual revenue by 10% each year for the next 2 years, aiming to surpass $477 billion in revenue by the end of 2024.

SMART

- **Specific:** Focuses on increasing revenue in all divisions.
- **Measurable:** Targets a 10% yearly increase, with a specific revenue goal of $477 billion.
- **Achievable:** Given Apple's strong market position and growing services sector, this is ambitious but doable.
- **Relevant:** Directly impacts the company's financial health and growth, supporting the broader goal of creating a successful company.
- **Time-bound:** Set to be achieved by the end of 2024.

Objective Goal 2

- Achieve and maintain a customer satisfaction rate of over 90% across all product lines by the end of 2024

SMART

- **Specific:** Targets customer satisfaction rate.
- **Measurable:** Aims for over 90% satisfaction, measured through customer surveys and feedback.
- **Achievable:** Consistent with Apple's focus on customer experience.
- **Relevant:** Relates to the goal of being a leader in customer service.
- **Time-bound:** By the end of 2024.

Core Values

The values we share at Apple inspire the work we share with everyone. That is also why we are committed to leaving the world better than we found it. Each of us contributes to that effort in our own way, bringing a passion for what we do best and what we believe matters most. Explore our people's stories and you will see that they are all different, yet each show what's possible when personal and professional values align.

Company Summary

Company Name: Apple Inc.
Year Founded: April 1st, 1976.
Year Incorporated: January 3rd, 1977.
Independent Audit Firm: Ernst & Young
Primary SIC Code: 3571 (Electronic Computers)

Secondary SIC Code: 7372 (Prepackaged Software)
Size and Characteristics:

- Global technology company with over 154,000 employees worldwide.

Ticker symbol: AAPL
Stock exchange used: the NASDAQ Global Select Market

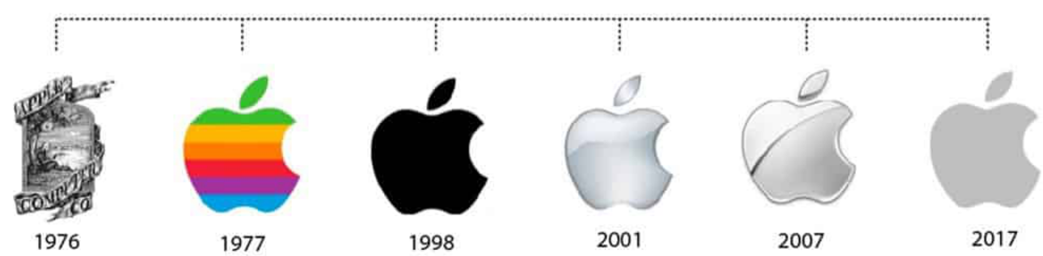
Apple Inc. is a company focusing on designing, manufacturing, and marketing smartphones, tablets, computers, and wearable devices.

The company was founded as Apple Computer Company by Steve Jobs, Steve Wozniak, and Ronald Wayne on April 1st, 1976. Ronald Wayne left Apple on April 12th, less than two weeks after the company was founded. The Apple I computer went on sale in July 1976 for $666.66 and about 200 units were sold.

To expand for business, Steven Jobs looked for investments. But the idea of having computers for ordinary people did not seem realistic at that time. Eventually, Steve Jobs was able to meet Mike Markkula through connecting with different people, who became an angel investor for Apple Computer. Then, Michael Scott served as the first president and CEO of Apple Computer in February 1977, recruited by Mike Markkula.

Apple went public on December 12th, 1980, selling 4.6 million shares at $22 per share. And they held the first shareholders meeting as a public company in January 1981.

Gill Amelio was fired as CEO of Apple by the board of directors on July 9th, 1997. Steve Jobs stepped in as interim CEO and became CEO from January 2000 to August 2011. Tim Cook became the new CEO when Steve Jobs resigned and passed away shortly after. Steve Jobs had a highly autocratic leadership style while the current CEO Tim Cook promotes a democratic leadership style that builds consensus among senior management for strategic decisions. Some people criticize Tim Cook for being less ambitious because there are fewer new products introduced when he is leader of the company compared to Steve Jobs. Steve Jobs is also known for his visionary leadership which emphasizes innovation, design excellence, and simplicity. While Tim Cook shifted to operational efficiency and supply chain management which focuses more on sustainability, inclusivity, and privacy.



Current Board of Directors:

- CEO – Tim Cook
- CFO – Luca Maestri
- CDO – Jony Ive

Locations and Subsidiaries:

- Headquarter: Cupertino, California

    - Apple Park/Apple Campus 2 is the headquarters of Apple Inc. In April 2017, it was opened to employees while construction is still underway. It has a total of 1.46 km2 and can house more than 12,000 employees. 80% of the site consists of green space and the center of the courtyard features an artificial pond.
- Other top locations:
    - Austin, Texas
        - Apple Campus is the second-largest campus after Cupertino and is crucial to the operation of Apple specifically in manufacturing, customer service, and software development.
    - Seattle, Washington
        - Seattle campus is in the center of Seattle and is carbon neutral and powered by 100% renewable energy.
    - London, United Kingdom
        - The Apple Store in Regent Street of London is in a historical building. The store offers a range of products and services.
    - Beijing, China
        - China is a crucial market for Apple and Apple China Headquarters in Beijing focus more on sales, marketing, and partnerships.
- Subsidiaries:
    - Beats Electronics
        - Acquired by Apple in 2014, beats focus on audio products such as headphones and speakers.
    - Shazam
        - Acquired by Apple in 2018, Shazam is a popular music recognition app used to identify songs, TV shows, movies, and advertisements based on audio samples.
    - Dark Sky
        - Acquired by Apple in 2020, Dark Sky was a popular weather app known for its weather forecasts and predictive weather data.

Employee skill base:
- Software engineers
- Designers
- Marketers
- Retail specialists

Company Culture:
- Innovation
- Privacy

Demographics:
- 38% W, 62% M
- 55.7% White, 19.2% Hispanic or Latino, 9.6% Asian, 11% African American, 4.5% unknown

Recent Changes:
- Acquisitions
    - 2023.9.5 – BIS Records
    - 2023.6.5 – Mira Labs
    - 2022.3.23 – Credit Kudos Inc.

- 2022.2.7 – AI Music.
- Leadership
    - 2011 – Steve Jobs -> Tim Cook

S.W.O.T Matrix for Apple

Strength: 1. Brand Loyalty 2. Innovation Leadership 3. Financial Strength	Weaknesses: 1. High Product Prices 2. iPhone Dependency 3. Limited Product Line
Opportunities: 1. Wearables + Health tech 2. VR and AR 3. Electric Vehicles	Threats: 1. Large Competitors 2. Antitrust and Privacy regulations 3. Supply chain disruptions

According to the Brand Keys' Customer Loyalty Engagement Index, Apple has consistently enjoyed the most loyal customer base in the tablet market. Maintaining such loyalty over multiple years highlights the strength of Apple's brand in retaining customers despite growing competition and market saturation. Apple's financial reports often show a sizable portion of its revenue stemming from repeat customers. This is particularly evident in its iPhone sales, which constitute a major part of its total revenue. The repeat purchase behavior of consumers for iPhones and other Apple products is a strong indicator of brand loyalty. Apple's commitment to innovation is evidenced by its significant investment in research and development. For instance, in recent years, Apple has spent billions on R&D, amounting to about 7% of its revenue in one year. This investment fuels the development of innovative technologies and products. Apple has a diverse product lineup including iPhones, iPads, Mac computers, Apple Watches, and services like Apple Music and iCloud. This diversity reduces reliance on any specific product for revenue. Apple Inc.'s financial performance from 2020 to 2022 reflects a pattern of growth and resilience in a challenging global economic environment. In the fiscal year 2022, Apple achieved significant financial milestones. The company reported a record revenue of $90.1 billion (about $280 per person in the US) for the fourth quarter, marking an 8% increase year-over-year. The quarterly earnings per diluted share also rose by 4% to $1.29. For the annual figures, Apple's revenue was $394.3 billion (about $1,200 per person in the US), an 8% increase compared to the previous year, and the annual earnings per diluted share were $6.11, up by 9%. These results highlight Apple's successful navigation of the macroeconomic challenges and its strong market position.

Apple's premium pricing strategy positions its products in the high-end market segment. This strategy limits the company's reach to middle- and high-income consumers, potentially excluding a huge portion of the market, particularly in emerging economies where lower-income segments are substantial. Customer surveys and brand perception studies frequently place Apple as a premium brand, indicating both the benefits and limitations of this pricing strategy. iPhone sales constitute a sizable portion of Apple's revenue. The iPhone represents over half of Apple's total revenue. This heavy reliance on a single product line exposes the company to risk if iPhone sales falter due to market saturation, competition, or changing consumer preferences. Lastly, Apple's product line, while successful, is narrow compared to its competitors. This limitation can be a risk if the market for one of its key products, like iPhones or Macs, declines. A more diversified product portfolio could potentially mitigate this risk.

Apple Inc.'s opportunities in the fields of health tech, VR (Virtual Reality), and electric vehicles represent significant areas for growth and expansion. Apple's foray into health tech is already showing promising developments. With over 1 billion active iPhones and 100 million Apple Watches globally, Apple has a solid foundation to influence the healthcare sector significantly. The company is leveraging its devices, particularly the Apple Watch, to offer innovative health features and services. This includes AI-powered health coaching services, heart health monitoring, sleep tracking, women's health features, and advancements in health research through the Apple Research app. In the VR sector, Apple is making strides with the introduction of the Apple Vision Pro, an AR/VR headset. This product marks Apple's entry into the AR/VR hardware market, where the global installed base for AR/VR headsets will reach 34.7 million by the end of the year. Regarding electric vehicles, Apple is considered to have the potential to disrupt this market. Although details about Apple's specific plans in the EV space are limited, there are rumors and predictions about partnerships with automobile manufacturers and potential moves like manufacturing outsourcing. Analysts estimate that a significant production base in the EV market could notably increase Apple's earnings per share.

Apple faces stiff competition from a variety of tech giants, each with its strengths and market segments. In the smartphone segment, Apple is a leading player, but it competes with Samsung, Microsoft, and Xiaomi, who have substantial market shares, especially in Asia. In early 2021, Microsoft briefly overtook Apple as the world's most valuable company, underscoring the intense competition Apple faces in the technology sector. The U.S. Justice Department has been investigating Apple since 2019 over allegations of market power abuse, which could potentially lead to an antitrust lawsuit. This investigation encompasses issues beyond the App Store, including how Apple's control over its devices may arm competitors. The scope of DOJ's probe includes concerns about Apple's practices regarding its physical devices, affecting competitors beyond app developers. A particular focus has been on complaints from companies like Tile, which competes with Apple's Air Tags. In the fiscal third quarter, Apple's CFO Luca Maestri warned that supply-chain issues would adversely affect sales, projecting a reduction of $4 billion to $8 billion (about $25 per person in the US). This substantial impact was primarily due to disruptions in Shanghai, China, which were aggravated by COVID-19 lockdowns and chip shortages. This situation not only affected production but also dampened demand in China, a key market for Apple. The company's management hoped these issues would be transient and improve over time, but they acknowledged the lack of clarity in the immediate outlook. Apple's overall fiscal second-quarter revenue in 2022 was $97.3 billion, an 8.6% increase from the previous year, indicating the company's resilience despite supply challenges.

Business Environment

Apple Inc. operates in a dynamic and competitive business environment, characterized by technological advancements, changing consumer preferences, and intense rivalry with key competitors. This report analyzes the business environment of Apple Inc., with a focus on Microsoft and Samsung as its main competitors.

Macro-Environment Analysis:

- **Technological Factors:**
  - *Innovation:* The technology sector is driven by innovation. Apple, Microsoft, and Samsung are all major players investing heavily in research and development to introduce cutting-edge products and services.
  - *Interconnected Technologies:* The integration of hardware, software, and services is a common trend. Apple's seamless ecosystem, Microsoft's software solutions, and Samsung's diverse product portfolio demonstrate the importance of interconnected technologies.
- **Economic Factors:**
  - *Global Economic Conditions:* Economic fluctuations impact consumer purchasing power. Apple's premium products may be affected differently than Samsung's diverse product range and Microsoft's software and services.
  - *Supply Chain Challenges:* Economic disruptions, such as the COVID-19 pandemic, highlight the importance of resilient supply chains. All three companies need to navigate global economic uncertainties and supply chain complexities.
- **Social Factors:**
  - *Consumer Preferences:* Understanding and adapting to diverse consumer preferences is crucial. Apple's focus on design and user experience contrasts with Samsung's emphasis on product variety, while Microsoft caters to productivity needs.
  - *Brand Perception:* Consumer perceptions of brand image and reputation influence purchasing decisions. Apple's brand loyalty, Microsoft's enterprise credibility, and Samsung's innovation contribute to their respective strengths.
- **Political and Legal Factors:**
  - *Regulatory Challenges:* Regulatory environments vary globally, impacting business operations. Antitrust concerns, data privacy regulations, and intellectual property laws are areas where legal challenges may arise.
  - *Global Trade Relations:* Political tensions and trade disputes can impact international business operations. The three companies must navigate geopolitical complexities for successful global strategies.

Competitive Analysis:

- **Market Structure:**
  - *Oligopolistic Competition:* The technology industry is dominated by a few major players. Apple, Microsoft, and Samsung compete across various segments, including smartphones, computers, and software solutions. In this form of

competitive environment, innovation is the main driver of competition between firms.

- **Competitive Advantages:**
    - *Apple's Strengths:* Apple's strength lies in its brand loyalty, innovative product design, and a seamless ecosystem. The integration of hardware, software, and services enhances the overall user experience.
    - *Microsoft's Strengths:* Microsoft's dominance in software, particularly with Windows and Office suites, gives it a strong foothold. Azure's cloud services and a focus on enterprise solutions contribute to its competitive edge.
    - *Samsung's Strengths:* Samsung's diverse product portfolio, spanning smartphones, consumer electronics, and semiconductor manufacturing, highlights its ability to adapt to various market demands.
- **Market Share and Growth:**
    - *Smartphone Market:* Apple and Samsung are direct competitors in the smartphone market, with both holding significant market shares globally. Microsoft's presence is more pronounced in software and services rather than hardware.
    - *Enterprise Solutions:* Microsoft has a robust presence in enterprise solutions, while Apple and Samsung focus on various aspects of consumer electronics and mobile technology.

Business Implications: The following factors included in the SWOT analysis are considered significant and must be specifically addressed in the analysis.

- **Brand Loyalty and Ecosystem**
    - *Brand Perception and Loyalty*: Apple's reputation for quality and design has made it a global leader in personal technology. This loyalty extends through yearly product launches that consistently receive substantial amounts of demand despite increased prices. Continuous brand loyalty has kept Apple at the top of the smartphone/personal technology industry, and it will be essential for its long-term success.
    - *Ecosystem expansion*: Apple has managed to seamlessly integrate consumer devices, examples include cloud services, software updates, and AppleCare. This further extends brand loyalty. These services help cement brand loyalty, and Apples Ecosystem is a KLP which will be listed below.
- **Leadership in Innovation**
    - *Oligopolistic market*: The technology industry's market structure features a few major firms. Within this type of competition, innovation is the prime competitive advantage between these firms. Continuous innovation, in the form of Research and Development, is necessary as firms are expected to innovate several times a year.

- *Advancements in Technology*: As technology continues to advance, there comes a demand for more advanced handhelds with features such as AI. The market for AI is not one that Apple has particularly competed in and in the future, this could be a weakness.

- **Navigating Regulatory Compliance**
  - *Regulatory Compliance and Legal Considerations*: Apple operates in various global markets and must navigate regulatory requirements and legal considerations related to product safety, privacy, intellectual property rights, and competition law. Compliance with these regulations and effectively managing any legal challenges is essential for maintaining business operations and reputation. This is applicable to Apple and all its direct competitors for future success.

Key Leverage Points: Factors of Apple listed in the SWOT and Business Environment which suggest that there is a competitive advantage in favor of Apple.

- **Innovative Product Line**
  - *Oligopolistic market*: The technology industry's market structure features a few major firms. Within this type of competition, innovation is the prime competitive advantage between these firms. Continuous innovation, in the form of Research and Development, is necessary as firms are expected to innovate several times a year.
  - *Brand Perception*: In terms of marketing and brand perception, Apple has separated itself from competitors as being considered some one of the most forward-thinking firms in the world. Many of their products were launched as the first of their kind and revolutionized a part of social life.
- **Opportunities in Wearables**
  - *Apple Watch:* The Apple watch is one of the more recent Apple launches which has already cemented itself as one of the premier smartwatches. This market is new and growing, with room for more wearable tech products, Apple has already entered this sector and made a name for itself.
  - *Health Technologies:* Related to the Apple Watch and the new market of wearables, health technology is another growing consumer market that Apple has tapped into and made strides. Healthcare technology is high in demand and Apple has consistently found ways to seamlessly integrate technology, style, and functionality into one product.
- **Apple Ecosystem: Cloud Services**
  - *Continuity among Products:* Something that Apple has done with cloud services is incentivized consumers to stay loyal to the brand. Consumers can stay better connected to each other operating on the same system, families, workplaces, etc.

Are more likely to keep purchasing Apple products if information is stored within the cloud.

Sustainable Competitive Advantage: Combination of factors that give a strategic/sustainable competitive advantage.

- **Investment in Research and Development**: Apple allocates significant resources to research and development, enabling the company to continuously innovate and introduce innovative technology. This commitment to R&D fosters product differentiation, drives technological advancements, and positions Apple at the forefront of industry trends.
- **Strong Financial Position**: Apple's robust financial position, characterized by substantial cash reserves and steady revenue streams, provides the company with flexibility and stability to invest in strategic initiatives, weather economic downturns, and pursue growth opportunities through acquisitions or organic expansion.
- **Global Reach and Distribution**: Apple's global presence and extensive distribution network enable it to reach diverse markets and cater to a wide range of customers worldwide. This broad market reach enhances brand visibility, drives sales growth, and mitigates risks associated with regional economic fluctuations or geopolitical tensions.

These sustainable competitive advantages collectively contribute to Apple's long-term success and position the company as a leader in the technology industry. However, maintaining and strengthening these advantages requires ongoing innovation, strategic planning, and adaptation to evolving market dynamics.

S.W.O.T Matrix for Microsoft

Strength: 1. Brand Reputation 2. Diverse Product portfolio 3. Market Leadership	Weaknesses: 1. Dependence on Windows/Office, 2. Limited presence in mobile devices, 3. Software Issues (Legacy), Microsoft
Opportunities: 1. AI + Machine Learning 2. Cybersecurity 3. Cloud Computing growth (Azure)	Threats: 1. Competition in cloud services 2. Open-Source software 3. Regulatory issues (antitrust/privacy),

Summary of Microsoft SWOT:
Microsoft holds a leadership position in several key markets, including operating systems, productivity software, and cloud computing, reflecting its ability to adapt and remain influential in the fast-evolving tech landscape. They also offer a diverse range of products and services, including software solutions like Windows and Office, hardware like Surface devices, and cloud services through Azure, catering to a wide spectrum of consumer and business needs. However, Microsoft's heavy reliance on its Windows operating system and Office productivity suite for a sizable portion of its revenue can be a vulnerability, especially as the market shifts towards

diverse operating systems and cloud-based services. This is quite concerning when considering that Apple has made formidable progress in cloud technology for years. Also, despite its dominance in desktop operating systems, Microsoft has struggled to gain a significant foothold in the mobile device market, facing stiff competition from iOS and Android, limiting its influence in this rapidly growing sector. Microsoft could further enhance its competitive edge by investing in AI and machine learning, areas where it can leverage its vast data resources and technical expertise to innovate and create new products or improve existing ones. This is an opportunity for not only them, but all major firms within the technology industries, and competition is sure to be stiff considering the potential profits. A threat to consider unique to Microsoft here is the rise of open-source software presents a threat to Microsoft's traditional business model, as it offers users free or lower-cost alternatives to many of Microsoft's proprietary products, potentially eroding its market share.

S.W.O.T Matrix for Samsung

Strength: 1. Diverse Product Portfolio 2. Global Recognition 3. Manufacturing Capabilities	Weaknesses: 1. Competition in Smartphones, Samsung 2. Perception of copycatting 3. Market dependency in Asia
Opportunities: 1. 5G Technology 2. Smart Home technology 3. Green Initiatives	Threats: 1. Powerful Competition 2. Currency exchange rates 3. Innovative pressures

Summary of Samsung SWOT:

Samsung has a highly diverse product range that includes smartphones, home appliances, semiconductors, and televisions, enabling the company to tap into various market segments and reduce dependence on any sole product line. Samsung is also a globally recognized brand, renowned for its innovation and quality, which positions it favorably in the competitive electronics market and helps in gaining customer trust and loyalty. Controlling heavy portions of the Asia markets allows Samsung to pose a realistic threat to Apple in terms of international presence. Samsung faces intense competition in the smartphone market from companies like Apple and various Chinese manufacturers, which challenges its market share and puts pressure on pricing and innovation. One of the biggest drawbacks of Samsung can be brand perception, Samsung has sometimes been perceived as a follower rather than an innovator, especially in its early years, with accusations of emulating competitors' designs and features, which can impact its brand image and customer perception. This is often a comparison made towards Apple products who are often recognized as the first in their field. Although this is not always true, brand perception is one of Samsung's largest weaknesses, and a large one for investors to consider. As a leader in telecommunications, Samsung has a significant opportunity to capitalize on the global rollout of 5G technology, both in terms of manufacturing 5G equipment and developing 5G-enabled devices. Samsung faces powerful competition in all its major product segments, from established players like Apple in smartphones to emerging competitors in home electronics and semiconductors, continuously challenging its market position. In an industry driven by rapid technological advancements, Samsung is under constant pressure to innovate and stay ahead in terms of technology, design, and user experience, requiring substantial and continuous investment in research and development.

Industry Analysis

NAICS 1: 334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing

The industry represented covers Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is a dynamic and vital segment of the telecommunications sector. This industry is responsible for producing a wide array of equipment essential for modern communication, including but not limited to broadcasting equipment for radio and television, cellular phones, GPS devices, pagers, and various wireless communication technologies. One of the key characteristics of this industry is its heavy reliance on technological innovation. Rapid advancements in digital technology, wireless communication, and the internet have significantly influenced the demand for and development of new and advanced products. This constant evolution drives companies within this industry to invest heavily in research and development to keep pace with technological changes and consumer expectations. Another important aspect is the competitive landscape. This industry faces intense global competition, with many players ranging from large multinational corporations to smaller specialized firms. The competitive environment is shaped not just by price and product quality, but also by factors such as technological innovation, brand reputation, and after-sales service.

Regulatory and policy decisions also play a crucial role in shaping the industry. Regulations related to spectrum allocation, broadcasting standards, and communication protocols can have significant implications for manufacturing processes and product offerings. In addition, international trade policies and tariffs can impact supply chains and market access for companies in this industry. Market demand in this industry is influenced by a variety of factors, including consumer preferences, the adoption of new technologies, and the overall economic climate. For example, the increasing adoption of smartphones and the transition to 5G networks have driven demand for new types of wireless communication equipment. Similarly, the broadcasting sector's shift from analog to digital technology has impacted the demand for broadcasting equipment. The industry also faces challenges such as the need for constant innovation, the management of complex supply chains, and the balancing of production costs with product affordability. Environmental and sustainability concerns, particularly related to electronic waste and energy consumption of devices, are increasingly becoming important for companies in this sector.

NAICS 2: 334111 Electronic Computer Manufacturing

This industry is primarily focused on the manufacturing and assembling of electronic computers, such as mainframes, desktop computers, laptops, and tablets. This sector is a critical component of the broader computer and electronics market and plays a central role in the global technology supply chain. The electronic computer manufacturing industry is characterized by its rapid pace of technological innovation. Advances in computing power, miniaturization of

components, and improvements in energy efficiency are constantly reshaping the landscape. This dynamism demands significant investment in research and development from companies within the industry to stay competitive and relevant. Competition in this industry is intense and global. It includes a mix of large multinational corporations and smaller specialized manufacturers. Companies compete on various fronts, including technological innovation, price, brand recognition, product quality, and after-sales service. The industry is also marked by a fast product lifecycle, with new models and technologies frequently entering the market.
Global supply chains play a crucial role in this industry.

The manufacturing process often involves sourcing components from multiple countries and assembling them in various locations. This global network can be affected by a range of factors, including international trade policies, tariffs, and geopolitical events, which can impact production costs and market prices. Consumer demand in the electronic computer manufacturing industry is influenced by a wide range of factors, including technological advancements, changes in consumer preferences, and economic conditions. For instance, the increasing preference for mobile computing devices like laptops and tablets has altered the demand dynamics within the industry. Regulatory and environmental considerations are increasingly prominent. Regulations concerning electronic waste, energy efficiency of devices, and the use of hazardous materials in manufacturing are influencing product design and lifecycle management. Companies are under growing pressure to adopt sustainable and environmentally friendly practices.

Financial Statement Analysis

Apple Inc.

The gross profit in 2022 is 43.31% of net sales which is an increase from 2021: 41.78% and 2020: 38.23%. The increasing trend in the gross profit percentage signifies an improvement in profitability. This might be attributed to higher sales volumes, better pricing strategies, or reduced costs of goods sold. The cash and cash equivalents in 2022 were at 6.70%, a decrease from 2021: 9.95% and 2020: 11.74%. This trend indicates a significant reduction in the proportion of liquid assets relative to total assets over the years. It can be from increased investments in long-term assets. Net Sales have been trending in a positive direction over a span of three years, the bounce back from COVID (2020) is nice to see. From 2021-2022 there was a 7.3% increase in Net Sales which is another good indicator, considering that this is post-covid and the markets were more open this could be a natural trend in most industries. Retained Earnings for 2022 are positive, meaning there is profit and the amount of debt accumulated does not exceed what has been made in earnings. This is once again trending positively if you look over the three-year span, however in the previous years before the debt did exceed retained earnings which could be a factor of covid. Earnings per share for 2022 was at 6.11, once again there is a nice positive trend from the EPS in 2020 (3.28). However, this could also indicate that demand is high, and it is an inconvenient time to buy if you are planning to buy low and sell high. For Marketable securities Apple has maintained several marketable securities above 30% for all three years, this is an indicator of several things, but risk management is one. Securities like this can help in risk mitigation but that depends on the specific mix of securities.

Samsung Electronics Co.

The gross profit in 2022 is 37.12% of net sales which is a decrease from 2021: 40.48% and 2020: 38.98%. A decrease in gross profit margin indicates that Samsung's cost of goods sold (COGS) may be increasing at a faster rate than its revenue. This could be due to several factors such as increased material costs, higher labor expenses, or changes in product mix towards lower-margin products. External factors like global supply chain disruptions, particularly in the tech industry, might have also impacted Samsung's production costs. Compared to Apple, Apple is doing better because its gross profit is increasing. The cash and cash equivalent in 2022 is 11.08%, it increased in 2021 to 9.15% and 2020: to 7.77%. This increase suggests improved liquidity, due to efficient cash management or increased cash inflows. Samsung might have focused on building a cash reserve to navigate uncertain market conditions, like the global economic changes post-2020. The total current assets for Samsung increased by 1% and the total liabilities decreased by 16.54. The increase in current assets alongside a decrease in liabilities is a strong indicator of financial health. This could be a result of effective asset management, like optimizing inventory and receivables, or paying off debts to reduce liabilities. However, the total equity increased by 17.54%, and even with the decrease in liability, the total liability and equity increased by 8.39%. growth might reflect confidence from shareholders and investors in Samsung's long-term prospects. Apple has some similar percentage increase for total liability and equity. Revenue in the Income Statement has increased 21.83% compared to 2021 and 2020. And 16.69% compared from 2022 to 2020, which means the company is earning more.

Microsoft

Gross Profit has remained stable between 67-68% of net sales. Stable gross profit is positive as it can indicate Financial Stability, Operational Efficiency, and Consistency.
Yearly decrease in weighted average common shares over the last three years. This could be explained by share buybacks which would mean that Microsoft is buying back its shares as it may feel they are underpriced. It could also be a cause of acquisitions, as it merges with other firms it takes on their shares. The decrease in average common shares can be a good indicator for current shareholders. The decrease in total current assets in 2022 (46.51%) could be explained by an increase in Property Plant and Equipment and Inventory.

Significant increases each year in Retained Earnings from 2020-2022, 2020 = 11.47%, 2021 = 17.09%, 2022 = 23.10%. This can entail profitability, financial stability, and shareholder value. Yearly increase in Beginning Balances and Net Income on cash flow statement. The yearly decrease in Cash and Cash equivalents used in investing activities in the Cash Flow statement resulting in a balance of (293) for 2022. Many of the decreases in areas like current assets, and financing cash seem to coincide with increases in Retained earnings, suggesting that the decrease in funds is going elsewhere to benefit the firm. Some things to consider include the fact that many of the financial characteristics of Microsoft's financial statements reveal strong benefits to current investors, however the benefit to future investors, which is what we are looking at, is a little less clear. Microsoft is in a stable position (Gross Profit, Retained Earnings, Beginning Balances), they also have a very pricy stock ($411.56 on 2/7/24 at 10:46 AM CST) which all need to be considered before investing, depending on the amount of capital and risk management someone would want they may consider this purchase.

Debt Financing

Current and Non-Current Liabilities

Total Current Liabilities have consistently increased in terms of percentage of total liabilities and stockholder equity. In 2020 current liabilities was at 32.54%, in 2021, 35.75%, and in 2022 43.65% (fig.1). Non-current Liabilities, however, have decreased over the three-year period. Accounting for 47.29% in 2020, 46.28% in 2021, and 41.98% in 2022. According to the information provided on the 10K Annual Reports, Apple does not have interest-bearing liabilities listed. Apple is showing evidence of increasing short-term liabilities and decreasing long-term liabilities, this could have implications for the company's liquidity position, financial risk profile, and overall financial health, depending on the specific circumstances and context of the company's operations and financial performance.

Lease Commitments or Obligations

The Company has lease arrangements for certain equipment and facilities, including corporate, data center, manufacturing, and retail space. These leases typically have original terms not exceeding 10 years and contain multiyear renewal options, some of which are certain of exercise. Payments under the Company’s lease arrangements may be fixed or variable, and variable lease payments are primarily based on purchases of output of the underlying leased assets. Lease costs associated with fixed payments on the Company’s operating leases were $1.9 billion, $1.7 billion, and $1.5 billion for 2022, 2021 and 2020, respectively. Lease costs associated with variable payments on the Company’s leases were $14.9 billion, $12.9 billion, and $9.3 billion for 2022, 2021 and 2020, respectively.

The Company made $1.8 billion, $1.4 billion, and $1.5 billion of fixed cash payments related to operating leases in 2022, 2021 and 2020, respectively. Noncash activities involving right-of-use (“ROU”) assets obtained in exchange for lease liabilities were $2.8 billion for 20 $3.3 billion for 2021 and $10.5 billion for 2020, including the impact of adopting the Financial Accounting Standards Board’s Accounting Standards Update No. 2016-02, Leases (Topic 842) in the first quarter of 2020.

Pension or other Post-Retirement Benefits

2022 Employee Stock Program: In the second quarter of 2022, shareholders approved the Apple Inc. 2022 Employee Stock Plan (the “2022 Plan”), which provides for broad-based equity grants to employees, including executive officers, and permits the granting of restricted stock units (“RSUs”), stock grants, performance-based awards, stock options and stock appreciation rights. About 1.3 billion shares were authorized for issuance pursuant to 2022 Plan awards when the plan was approved on March 4, 2022.

Apple Inc. Non-Employee Director Stock Plan**:** The Apple Inc. Non-Employee Director Stock Plan (the “Director Plan”) is a shareholder-approved plan that (i) permits the Company to grant awards of RSUs or stock options to the Company’s non-employee directors, (ii) provides for automatic initial grants of RSUs upon a non-employee director joining the Board of Directors and automatic annual grants of RSUs at each annual meeting of shareholders, and (iii) permits the Board of Directors to prospectively change the value and relative mixture of stock options and RSUs for the initial and annual award grants and the methodology for determining the number of shares of the Company's common stock subject to these grants, in each case within the limits set forth in the Director Plan and without further shareholder approval. A maximum of about 45 million shares (split-adjusted) were authorized for issuance pursuant to Director Plan awards when the plan was last amended on November 9, 2021.

401k Plan: The Company's 401(k) Plan is a tax-qualified deferred compensation arrangement under Section 401(k) of the Internal Revenue Code. Under the 401(k) Plan, participating U.S. employees may contribute a portion of their eligible earnings, subject to applicable U.S. Internal Revenue Service and plan limits. The Company matches 50% to 100% of each employee's contributions, depending on length of service, up to a maximum of 6% of the employee's eligible earnings.

Debt-Financing Activities over the Past 3 Years

To protect the Company's term debt or marketable securities from fluctuations in interest rates, the Company may enter into interest rate swaps, options, or other instruments. The Company designates these instruments as either cash flow or fair value hedges. To further limit credit risk, the Company enters master netting arrangements with the respective counterparties to the Company's derivative contracts, under which the Company is allowed to settle transactions with a single net amount payable by one party to the other.

To manage interest rate risk on certain of its U.S. dollar–denominated fixed-rate notes, the Company has entered interest rate swaps to effectively convert the fixed interest rates to floating interest rates on a portion of these notes. Additionally, to manage foreign currency risk on certain of its foreign currency–denominated notes, the Company has entered foreign currency swaps to effectively convert these notes to U.S. dollar–denominated notes. The effective interest rates for the Notes include the interest on the Notes, amortization of the discount or premium and, if applicable, adjustments related to hedging. The Company recognized $2.8 billion, $2.6 billion, and $2.8 billion of interest expense on its term debt for 2022, 2021 and 2020, respectively.

Contingent Liabilities Reported or Disclosed

Epic Games Lawsuit

Epic Games, Inc. ("Epic") filed a lawsuit in the U.S. District Court for the Northern District of California (the "Northern California District Court") against the Company alleging violations of federal and state antitrust laws and California's unfair competition law based upon the Company's operation of its App Store. The Company filed a counterclaim for breach of contract. On September 10, 2021, the Northern California District Court ruled in favor of the Company with respect to nine out of the ten counts included in Epic's claim, and in favor of the Company with respect to the Company's claims for breach of contract. The Northern California District Court found that certain provisions of the Company's App Store Review Guidelines violate California's unfair competition law and issued an injunction. Epic appealed the decision. The Company filed a cross-appeal and has been granted a stay pending the appeal.

Other Legal Proceedings

The Company is subject to other legal proceedings and claims that have not been fully resolved and that have arisen in the ordinary course of business. The Company settled certain matters during the fourth quarter of 2022 that did not individually or in aggregate have a material impact on the Company's financial condition or operating results. The outcome of litigation is inherently uncertain. If one or more legal matters were resolved against the Company in the reporting period for amounts above management's expectations, the Company's financial condition and operating results for that reporting period could be materially adversely affected.

Losses or unauthorized access to or release of confidential information, including personal information, could subject the Company to significant reputational, financial, legal, and operational consequences.

The Company's business requires it to use and store confidential information, including personal information, with respect to the Company's customers and employees. The Company devotes significant resources to network and data security, including encryption and other security measures intended to protect its systems and data. But these measures cannot provide absolute security, and losses or unauthorized access to or releases of confidential information occur and could materially adversely affect the Company's business, reputation, results of operations and financial condition.

Equity Financing

Over Apple's past 3 years, the company has seen a decreasing trend in equity account balances. The shareholder's equity was at $70,339 (in millions) in 2020 to $50,672 (in millions) in 2022. Apple has also seen a decreasing trend in the number of outstanding shares. From $17,528 (millions of shares) in 2020 to $16,326 (millions of shares) in 2022. The decrease is primarily due to the company's share buyback program. When a company buys back its shares, these shares are either retired or held as treasury stock. In both cases, they are no longer considered outstanding shares. Share buyback programs are a common way for companies to return value to shareholders, and they can lead to an increase in the earnings per share (EPS) metric, as the net income is divided by a smaller number of shares.

Apple Inc. (NASDAQ: AAPL) does not have more than one class of stock in terms of common and preferred shares. They only have one class of common stock available to the public. Apple has declared dividends in the past three years. Since reinstating its dividend program in 2012, Apple has consistently paid quarterly dividends to its shareholders. The pattern of dividend payments increased through the years 20-22. Apple paid $14,081 (in millions) at the end of 2020, $14,467 in 2021, and $14,841in 2022. These dividends are paid out of the company's earnings, and the specific amounts and dates of these payments are usually announced alongside the company's quarterly earnings reports.

In 2022, as part of its capital return program, Apple continued its practice of repurchasing its shares. This treasury stock activity involves buying back shares from the marketplace and holding them in the company's treasury. By doing so, Apple aimed to increase shareholder value by potentially raising the stock's market value through a reduction in the number of shares outstanding. Additionally, this strategy is often used by companies with significant cash reserves, like Apple, to make use of excess capital, especially if they believe their shares are undervalued. It also helps to offset the dilutive effect of stock options exercised under employee compensation plans. Apple also offers stock options as part of its compensation package for employees. Stock options are a common form of employee incentive among many corporations, especially in the technology sector. These options give employees the right, but not the obligation, to buy a certain number of shares of the company's stock at a predetermined price (known as the exercise price) after a specified period, known as the vesting period. Stock options can be particularly valuable in a company like Apple, which has seen significant stock price growth over the years. However, the value of these options is dependent on the stock market performance. If the market price exceeds the exercise price, the options can be beneficial for employees. On the other hand, if the stock price is below the exercise price, the options would be "underwater" and thus less beneficial.

Apple’s equity financing activities primarily revolve around its use of common stock, rather than preferred stock or other equity instruments. Historically, the company has relied on issuing common stock to raise capital, particularly in its early years and during periods of expansion. Over time, as Apple became more financially stable and generated significant profits, its reliance on external equity financing diminished. In recent years, Apple's equity activities have been more focused on managing its outstanding shares rather than issuing new ones. This includes significant stock buyback programs, where Apple repurchases its shares from the open market. Such buybacks reduce the number of outstanding shares, potentially increasing the value of remaining shares and earnings per share. This practice has been a key part of Apple's strategy to return value to shareholders. Additionally, Apple uses stock-based compensation for its employees, including stock options and restricted stock units. This form of compensation aligns employee interests with shareholder interests by providing incentives for employees to contribute to the company's long-term success. It is important to note that while equity financing has played a role in Apple's growth, the company's strong financial performance has allowed it to rely more on its substantial cash reserves and less on external equity financing in recent years. The specifics of Apple's equity financing activities can be found in detail in their annual reports and filings with the Securities and Exchange Commission.

Financial Ratios and Comparison to Industry Benchmarks

Figure 13 shows five financial ratios comparison of Apple to the 2 competitor Samsung and Microsoft and industry average. Apple’s quick ratio has declined from 2020: 1.33 to 2022: 0.85 indicating a decrease in liquidity and potentially a decreased ability to meet short-term obligations. Compared to the industry average, there is also a significant decrease from 2020: 1.48 to 2022: 0.43, Apple was below average in 2020 (1.33<1.48) and 2021 (1.02<1.15) but was above average in 2022 (0.85>0.43). Samsung’s quick ratio declined from 2021: 2.48 to 2022: 2.12 but remained high compared to both Apple and the industry average and higher than Microsoft in 2021 (2.48>2.05) and 2022 (2.12>1.75) indicating a strong liquidity. Microsoft’s quick ratio declined from 2020: 2.49 to 2022: 1.75 but also remained high compared to both Apple and the industry average, indicating that they also have strong liquidity. Compared to the industry average and the two competitors, Apple is not doing well in terms of having liquid assets, even though it is above average in 2022, it is still a lot lower than the 2 competitors in all three years.

Apple's operating profit margin has shown a consistent increase from 2020: 24.44% to 2022: 30.2%, indicating improvement in profitability over these 3 years. The industry average operating profit margin fluctuated over the 3-year span, increase from 2020: 14.2% to 2021: 18.4% and a decrease in 2022:16.9%. Apple is well above the industry average operating profit margin (2020: 24.44%>14.2%, 2021: 29.85%>18.4%, 2022: 30.2%>16.9%) meaning Apple is doing well, having a steady increase in profitability over the years. Samsung's operating profit margin increased from 2020: 15.35% to 2021: 19.08% but then decreased in 2022: 15.37%. Microsoft's operating profit margin remained high although there was a slight decrease from 2021: 42.3% to 2022: 42.22%. Apple is doing very well in their profitability, a lot higher than industry average and Samsung but not as well as Microsoft (2020: 37.08%>24.44%, 42.3%>29.85%, 42.22%>30.2%).

Apple's P/E ratio has shown a declining trend from 2020: 91.54 to 2022: 66.83. There is also a declining trend in the industry average from 2020: 39.44 to 2022: 21.22. Even though Apple has a declining trend of P/E ratio it is still above industry average, and the trend for industry average is also declining. Samsung's P/E ratio has also shown a declining trend over the 3 years (2020: 17.88, 2021: 11.73, 2022: 6.74), suggests a significant decrease in the stock's valuation relative to its earnings. Microsoft's P/E ratio declined over the 3-year span, even though it is still relatively high compared to the industry average but still lower than Apple. Investors are more willing to pay per dollar of reported profits for Apple than the 2 competitors and the industry average, suggesting Apple is a good option for investors.

Apple's Return on Total Assets (ROA) has shown a consistent increase from 2020 to 2022, indicating improved efficiency in generating profits from assets. The industry average for ROA also shows a consistent increase from 2020 to 2022, but Apple is higher than the industry averages all 3 years (2020: 17.73%>15.21%, 2021: 26.97%>23.96%, 2022: 28.29%>25.11%). Samsung's ROA has also increased steadily over the 3-year span (2020: 6.98%, 2021: 9.35%, 2022: 12.41%) but at a lower rate compared to Apple. Samsung's ROA is also lower than Apple, Microsoft, and industry average. Microsoft's ROA shows increase from 2020: 14.7% to 2022: 19.94%, although is lower than Apple, but still higher than industry average and Samsung. Apple is doing well in their return on investment of total assets, they have higher return all 3 years compared to the 2 competitors and industry average.

Apple's Return on Common Equity (ROE) has shown a significant increase from 2020: 87.32% to 2022: 161.54%, indicating substantial improvement in the company's ability to generate profit from shareholders' equity. The industry average for ROE also has a consistent increase from 2020: 70.62% to 2022: 154.89% but Apple has higher returned all 3 years (2020: 87.32%>70.62%, 2021: 150.46%>117.01%, 2022: 161.54%>154.89%) compared to the industry average. Samsung's ROE has also increased over the 3 years but at a much lower rate compared to Apple and remained significantly lower than Apple's (2020: 87.32%>6.98%, 2021: 150.46%>9.35%, 2022: 161.54%>12.41%) and the industry average. Microsoft's ROE has shown some fluctuations, increased from 2020: 38.47% to 2021: 43.71% but slightly decreased from 2021: 43.71% to 2020: 42.48%. Apple still has higher ROE compared to the 2 competitors and industry average meaning that company ability to generate profit from shareholders' equity is strong.

For potential investors, Apple's high ROA indicates that Apple is efficiently utilizing its assets to generate profits and high ROE indicates that Apple is effectively generating profits relative to shareholders' equity. A company efficiently using shareholder investments to generate returns is a positive sign for investors who would like to maximize their returns. Apple's high ROA and ROE suggest that Apple's stock may be a promising investment opportunity.

Financial Conclusions/Reasoning & Recommendations for Investing

ROA and ROE both increased over the three-year period, this indicates that the company has been effectively managing its operations to generate higher profits from its assets. From a profitability point-of-view, Apple seems like a worthwhile investment based on these ratios and industry standards. This is further reinforced by their profit margins over the period, all of which increase over time and lie above the averages.

The quick ratio declining from 2020 to 2022 may indicate a worsening liquidity position for the firm. This could potentially raise concerns about the firm's ability to meet its short-term obligations. Apple's consistent increase in operating profit margin from 2020 to 2022 is a positive sign. It suggests that the company has been improving its profitability over time, which could be due to several factors such as cost-cutting measures or increasing revenues. Apple's operating profit margin consistently exceeds the industry average over the three years, indicating that it is performing better in terms of profitability compared to its industry peers. Both Apple's and the industry's declining trend in P/E ratio from 2020 to 2022 might suggest a decrease in investor confidence or expectations for future earnings growth. However, it is essential to consider the context of the industry and market conditions when interpreting this trend.

When looking at Apple and its competition, we feel strongly that the competition is oligopolistic. There are a few large firms that control vast market shares, all these firms show a strong ability to generate profit. The way that they can gain a distinct edge against each other is through innovation and innovative technology, this can capture a new unknown market before competitors, opening doors to Intellectual Property opportunities, licensing, and profit. One of the most important financial moves that these Tech firms can make is to invest in R&D and Apple has an impressive ability to do so. They have more Cash and Cash equivalents than Microsoft, yet they are still out-competing them in terms of R&D spending. This is very impressive and points positively towards Apple's future in staying relevant.

Overall, while the decline in the quick ratio raises some concerns about liquidity, Apple's impressive performance in terms of profitability and efficiency metrics, along with its outperformance compared to industry averages, could make it an attractive investment opportunity. However, it is essential to conduct further analysis and consider other factors such as market conditions, competitive landscape, and future growth prospects before making an investment decision.

In terms of long-term valuation, it is difficult to accurately recommend whether to buy/ not but Apple stock. Obviously, it depends on the individual buyers' preferences in terms of risk and confidence. What we do know is that Apple is one of the largest, strongest, and most financially consistent firms in the world today. They have solidified themselves as a tech giant, showing massive profitability, good efficiency, and competitive market ratios. Consumer satisfaction is high, brand perception is fantastic, and they are highly competitive. However, Apple is, from an investment standpoint, a little difficult in terms of profitability. They are what we would call a "moderate buy." The next five years could see higher returns from Apple stock based on the market trends of AI technology, and wearables/health technology. These seem to be the next innovations in demand, and Apple can solidify itself again as a powerful firm. While returns may not be extremely high, if an investor is willing to buy into the high valuation and stock price, it does seem to be a consistent stock.

Recent antitrust litigation coming from the European Union regarding unlawful abuse of Apple's power over streaming services. The fines total almost $2 billion (about $6 per person in the US) (about $6 per person in the US) USD, and it can be assumed that this might damage investor confidence. Apple's stock does show significant dips yearly and might be a good stock to consider purchasing during one of those low points. Overall, we do not advise against investing in Apple, however, we would advise not to expect high short-term gains. Instead, this is a safe long-term "moderate buy" stock. We would expect investors who are interested in low-risk investments, long-term stability, successful products, and high-quality brand reputation, to be a great fit for Apple stock.

References

Aljafari, Abdulla. "Apple Inc. Industry Analysis Business Policy and Strategy." *International Journal of Scientific & Engineering Research*, 7, 3, 2016. https://www.ijser.org/researchpaper/Apple-Inc-Industry-Analysis-Business-Policy-and-Strategy.pdf

Apple. "Apple Compliance - Ethics and Compliance - Apple." *Apple Compliance*, www.apple.com/compliance.

Apple Inc. "Careers at Apple: Join a Team at Apple Seattle." *Apple*, www.apple.com/careers/us/work-at-apple/seattle.html#:~:text=Like%20every%20Apple%20corporate%20facility,our%20fiscal%20year%202030%20footprint.

"Apple Inc Company Profile - Apple Inc Overview." *Global Data*, www.globaldata.com/company-profile/apple-inc.

Apple Number of Employees, Statistics, Diversity, Demographics, and Facts - Zippia. 21 July 2023, www.zippia.com/apple-careers-825/demographics.

"Apple Park." *Wikipedia*, 5 Feb. 2024, https://en.wikipedia.org/wiki/Apple_Park

"Beats Electronics." *Wikipedia*, 23 Jan. 2024, https://en.wikipedia.org/wiki/Beats_Electronics

Beattie, Emily. "E&Y Replaces KPMG as Apple's Auditor." *Accountancy Daily*, www.accountancydaily.co/ey-replaces-kpmg-apples-auditor#:~:text=Ernst%20%26%20Young%20has%20been%20hired,accounting%20firm%20every%20five%20years.

Fung, Brian. "Apple Acquires Weather App Dark Sky | CNN Business." *CNN Business*, 31 Mar. 2020, www.cnn.com/2020/03/31/tech/apple-dark-sky/index.html.

"History of Apple Inc." *Wikipedia*, 3 Dec. 2023, https://en.wikipedia.org/wiki/History_of_Apple_Inc.

"List of Mergers and Acquisitions by Apple." *Wikipedia*, 21 Dec. 2023, https://en.wikipedia.org/wiki/List_of_mergers_and_acquisitions_by_Apple

Pereira, Daniel. "Apple Mission and Vision Statement." *Business Model Analyst*, 8 Apr. 2023, https://businessmodelanalyst.com/apple-mission-and-vision-statement/#:~:text=Apple%27s%20mission%20statement%20is%20 "to, better%20than%20we%20found%20it."

"Shazam (Application)." *Wikipedia*, 28 Mar. 2023, en.wikipedia.org/wiki/Shazam_(application)#:~:text=Shazam%20is%20an%20application%20that.

Team, Investopedia. "Who Are Apple's Main Competitors in Tech?" *Investopedia*, 16 July 2023, www.investopedia.com/ask/answers/120314/who-are-apples-aapl-main-competitors.asp.

"How Apple Is Organized for Innovation." *Harvard Business Review*, 16 Feb. 2024, hbr.org/2020/11/how-apple-is-organized-for-innovation.

Lee, Timothy B. "How Apple Became the World's Most Valuable Company." Vox, 17 Nov. 2014, www.vox.com/2014/11/17/18076360/apple.

Apple: How These 3 Financial Trends Tell a Compelling Story - Apple, www.thestreet.com/apple/stock/apple-how-these-3-financial-trends-tell-a-compelling-story. Accessed 1 Mar. 2024

Kifleswing. “Apple’s Most Profitable Line of Business Is Making up for Some Hardware struggles.” *CNBC*, 4 Aug. 2023, www.cnbc.com/2023/08/03/apple-services-arevery-profitable-and-may-be-ready-for-takeoff-again.html.

Gallagher, William. “Apple Was Founded 47 Years Ago, on April 1, 1976.” *AppleInsider*, AppleInsider, 29 Mar. 2023, appleinsider.com/articles/20/04/01/apple-was-founded-44-years-ago-on-april-1-1976.

“Apple Inc. (AAPL) Stock Price, News, Quote & History.” *Yahoo! Finance*, Yahoo!, 2 Mar. 2024, finance.yahoo.com/quote/AAPL.

Appendix

Figure 1: Apple Inc. Balance Sheet

ASSETS	in millions, except per share data							
	2022	Common-Sizing	2021	Common-Sizing	2020	Common-Sizing	2022-2020	2021-2020
Current assets							Horizontal	Horizontal
Cash and cash equivalents	$ 23,646	6.70%	$ 34,940	9.95%	$ 38,016	11.74%	-38%	-8.09%
Maketable securities	$ 24,658	6.99%	$ 27,699	7.89%	$ 52,927	16.34%	-53%	-47.67%
Accounts receivable - net	$ 28,184	7.99%	$ 26,278	7.49%	$ 16,120	4.98%	75%	63.01%
Inventories	$ 4,946	1.40%	$ 6,580	1.87%	$ 4,061	1.25%	22%	62.03%
Vendor non-trade receivables	$ 32,748	9.28%	$ 25,228	7.19%	$ 21,325	6.58%	54%	18.30%
Other current assets	$ 21,223	6.02%	$ 14,111	4.02%	$ 11,264	3.48%	88%	25.28%
Total current assets	$ 135,405	38.38%	$ 134,836	38.41%	$ 143,713	44.37%	-6%	-6.18%
Non-current assets								
Marketable securities	$ 120,805	34.25%	$ 127,877	36.43%	$ 100,887	31.15%	20%	26.75%
Property, plant and equipment, net	$ 42,117	11.94%	$ 39,440	11.24%	$ 36,766	11.35%	15%	7.27%
Other non-current assets	$ 54,428	15.43%	$ 48,849	13.92%	$ 42,522	13.13%	28%	14.88%
Total non-current assets	$ 217,350	61.62%	$ 216,166	61.59%	$ 180,175	55.63%	21%	19.98%
Total assets	$ 352,755	100.00%	$ 351,002	100.00%	$ 323,888	100.00%	9%	8.37%
LIABILITIES								
Current liabilities	Common-Sizing			Common-Sizing		Common-Sizing		
Accounts payable	$ 64,115	18.18%	$ 54,763	15.60%	$ 42,296	13.06%	51.59%	29.48%
Other current liabilities	$ 60,845	17.25%	$ 47,493	13.53%	$ 42,684	13.18%	42.55%	11.27%
Deferred revenue	$ 7,912	2.24%	$ 7,612	2.17%	$ 6,643	2.05%	19.10%	14.59%
Commercial paper	$ 9,982	2.83%	$ 6,000	1.71%	$ 4,996	1.54%	99.80%	20.10%
Term debt	$ 11,128	3.15%	$ 9,613	2.74%	$ 8,773	2.71%	26.84%	9.57%
Total current liabilities	$ 153,982	43.65%	$ 125,481	35.75%	$ 105,392	32.54%	46.10%	19.06%
Non-current liabilities								
Term debt	$ 98,959	28.05%	$ 109,106	31.08%	$ 98,667	30.46%	0.30%	10.58%
Other non-current liabilities	$ 49,142	13.93%	$ 53,325	15.19%	$ 54,490	16.82%	-9.81%	-2.14%
Total non-current liabilities	$ 148,101	41.98%	$ 162,431	46.28%	$ 153,157	47.29%	-3.30%	6.06%
Total liabilities	$ 302,083	85.64%	$ 287,912	82.03%	$ 258,549	79.83%	16.84%	11.36%
STOCKHOLDERS' EQUITY								
Common stock	$ 64,849	18.38%	$ 57,365	16.34%	$ 50,779	15.68%	27.71%	12.97%
Retained earnings	$ (3,068)	-0.87%	$ 5,562	1.58%	$ 14,966	4.62%	-120.50%	-62.84%
Accumulated other comprehensive income/(loss)	$ (11,109)	-3.15%	$ 163	0.05%	$ (406)	-0.13%	2636.21%	-140.15%
Total stockholders' (deficit) equity	$ 50,672	14.36%	$ 63,090	17.97%	$ 65,339	20.17%	-22.45%	-3.44%
Total liabilities and stockholders' equity	$ 352,755	100.00%	$ 351,002	100.00%	$ 323,888	100.00%	8.91%	8.37%

Figure 2: Apple Inc. Income Statement

INCOME STATEMENT: Apple.INC	in millions, except per share data							
	2022		2021		2020		2022-2020	2021-2020
		Common-Sizing		Common-Sizing		Common-Sizing	Horizontal	Horizontal
Net sales	$ 394,328		$ 365,817		$ 274,515		43.65%	33.26%
Cost of goods sold	223,546	56.69%	212,981	58.22%	169,559	61.77%	31.84%	25.61%
Gross Profit	170,782	43.31%	152,836	41.78%	104,956	38.23%	62.72%	45.62%
Operating expenses:								
Selling, general, and administrative	25,094	6.36%	21,973	6.01%	19,916	7.25%	26.00%	10.33%
Research and Developement	26,251	6.66%	21,914	5.99%	18,752	6.83%	39.99%	16.86%
Total operating expenses	27,792	7.05%	43,887	12.00%	38,668	14.09%	-28.13%	13.50%
Operating income	119,437	30.29%	108,949	29.78%	66,288	24.15%	80.18%	64.36%
Interest and other (income) expense:								
Interest and investment income	228	0.06%	60	0.02%	397	0.14%	-42.57%	-84.89%
Interest expense	2,931	0.74%	2,645	0.72%	2,873	1.05%	2.02%	-7.94%
Interest and other, net	3,159	0.80%	2,705	0.74%	3,270	1.19%	-3.39%	-17.28%
Earnings before provision for income taxes	119,103	30.20%	109,207	29.85%	67,091	24.44%	77.52%	62.77%
Provision for income taxes	19,300	4.89%	14,527	3.97%	9,680	3.53%	99.38%	50.07%
Net earnings (Net Income)	$ 99,803	25.31%	$ 94,680	25.88%	$ 57,411	20.91%	73.84%	64.92%
						0.00%		
Basic weighted average common shares	16,215,963	4112.30%	16,701,272	4565.47%	17,352,119	6321.01%	-6.55%	-3.75%
Basic earnings per share	$ 6.15	0.00%	$ 5.67	0.00%	$ 3.31	0.00%	85.80%	71.30%
Diluted weighted average common shares	16,325,819	4140.16%	16,864,919	4610.21%	17,528,214	6385.16%	-6.86%	-3.78%
Diluted earnings per share	$ 6.11	0.00%	$ 5.61	0.00%	$ 3.28	0.00%	86.28%	71.04%

Figure 3: Apple Inc. Statement of Cash Flow

	2022	Common-Sizing	2021	Common-Sizing	2020	Common-Sizing	2022-2020	2021-2020
Cash, cash equivalents and restricted cash, beginning balances	$ 35,929		$ 39,789		$ 50,224		-28%	-21%
Cash Flows from Operating Activities								
Net income	$ 99,803		$ 94,680		$ 57,411		74%	65%
Asjustments to recondile net income to cash generated by operating activities:								
Depreciation and amortization	$ 11,104	11.13%	$ 11,284	11.92%	$ 11,056	19.26%	0%	2%
Share-based compensation expense	$ 9,038	9.06%	$ 7,906	8.35%	$ 6,829	11.89%	32%	16%
Deferred income tax expense/(benefit)	$ 895	0.90%	$ (4,774)	-5.04%	$ (215)	-0.37%	-516%	2120%
Other	$ 111	0.11%	$ (147)	-0.16%	$ (97)	-0.17%	-214%	52%
Changes in operating assets and liabilities:								
Accounts receivable, net	$ (1,823)	-1.83%	$ (10,125)	-10.69%	$ 6,917	12.05%	-126%	-246%
Inventories	$ 1,484	1.49%	$ (2,642)	-2.79%	$ (127)	-0.22%	-1269%	1980%
Vendor non-trade receivables	$ (7,520)	-7.53%	$ (3,903)	-4.12%	$ 1,553	2.71%	-584%	-351%
Other current and non-current assets	$ (6,499)	-6.51%	$ (8,042)	-8.49%	$ (9,558)	-16.65%	-32%	-16%
Account payable	$ 9,448	9.47%	$ 12,326	13.02%	$ (4,062)	-7.08%	-333%	-403%
Deferred revenue	$ 478	0.48%	$ 1,676	1.77%	$ 2,081	3.62%	-77%	-19%
Other current and non-current liabilities	$ 5,632	5.64%	$ 5,799	6.12%	$ 8,916	15.53%	-37%	-35%
Cash generated by operating activities	$ 122,151	122.39%	$ 104,038	109.88%	$ 80,674	140.52%	51%	29%
Investing Activities:								
Purchases of marketable securities	$ (76,923)	-77.07%	$ (109,558)	-115.71%	$ (114,938)	-200.20%	-33%	-5%
Proceeds from maturities of marketable securities	$ 29,917	29.98%	$ 59,023	62.34%	$ 69,918	121.79%	-57%	-16%
Proceeds from sales of marketable securities	$ 37,446	37.52%	$ 47,460	50.13%	$ 50,473	87.92%	-26%	-6%
Payments for acquisitions of property, plant and equipment	$ (10,708)	-10.73%	$ (11,085)	-11.71%	$ (7,309)	-12.73%	47%	52%
Payments made in connection with business acquisitions, net	$ (306)	-0.31%	$ (33)	-0.03%	$ (1,524)	-2.65%	-80%	-98%
Other	$ (1,780)	-1.78%	$ (352)	-0.37%	$ (909)	-1.58%	96%	-61%
Cash used in investing activities	$ (22,354)	-22.40%	$ (14,545)	-15.36%	$ (4,289)	-7.47%	421%	239%
Financing Acitivities:								
Payments for taxes related to net share settlement of equity awards	$ (6,223)	-6.24%	$ (6,556)	-6.92%	$ (3,634)	-6.33%	71%	80%
Payments for dividends and dividend equivalents	$ (14,841)	-14.87%	$ (14,467)	-15.28%	$ (14,081)	-24.53%	5%	3%
Repurchases of common stock	$ (89,402)	-89.58%	$ (85,971)	-90.80%	$ (72,358)	-126.04%	24%	19%
Proceeds from issuance of term debt, net	$ 5,465	5.48%	$ 20,393	21.54%	$ 16,091	28.03%	-66%	27%
Repayments of term debt	$ (9,543)	-9.56%	$ (8,750)	-9.24%	$ (12,629)	-22.00%	-24%	-31%
Proceeds from commercial paper, net	$ 3,955	3.96%	$ 1,022	1.08%	$ (963)	-1.68%	-511%	-206%
Other	$ (160)	-0.16%	$ 976	1.03%	$ (126)	-0.22%	27%	-875%
Cash used in financing activities	$ (110,749)	-110.97%	$ (93,353)	-98.60%	$ (86,820)	-151.23%	28%	8%
Decrease in cash, cash equivalents, and restricted cash	$ (10,952)	-10.97%	$ (3,860)	-4.08%	$ (10,345)	-18.02%	6%	-63%
Cash and cash equivalents and restricted cash, ending balances	$ 24,977	25.03%	$ 35,929	37.95%	$ 39,789	69.31%	-37%	-10%
Supplemental cash flow disclosure								
Cash paid for income taxes, net	$ 19,573	19.61%	$ 25,385	26.81%	$ 9,501	16.55%	106%	167%
Cash paid for interest	$ 2,865	2.87%	$ 2,687	2.84%	$ 3,002	5.23%	-5%	-10%

Figure 4: Samsung Balance Sheet

ASSETS	in millions, except per share data							
	2022	Common-Sizing	2021	Common-Sizing	2020	Common-Sizing	2022-2020	2021-2020
Current assets							Horizontal	Horizontal
Cash and cash equivalents	$ 38,477,921	11.08%	$ 34,115,412	9.15%	$ 24,890,848	7.77%	55%	37.06%
Short-term financial instruments	$ 50,422,462	14.52%	$ 71,417,748	19.15%	$ 78,310,091	24.44%	-36%	-8.80%
Short-term financial assets at amortized cost	$ 321,117	0.09%	$ 2,944,705	0.79%	$ 2,335,630	0.73%	-86%	26.08%
Short-term financial assets at fair value through pro	$ 22,523	0.01%	$ 35,624	0.01%	$ 60,528	0.02%	-63%	-41.14%
Trade receivables	$ 27,666,503	7.97%	$ 35,585,565	9.54%	$ 26,231,413	8.19%	5%	35.66%
Non-trade receivables	$ 4,762,589	1.37%	$ 3,930,828	1.05%	$ 3,053,511	0.95%	56%	28.73%
Prepaid expenses	$ 2,221,141	0.64%	$ 2,042,001	0.55%	$ 1,919,680	0.60%	16%	6.37%
Inventories	$ 40,419,724	11.64%	$ 36,172,043	9.70%	$ 27,144,693	8.47%	49%	33.26%
Other current assets	$ 4,892,415	1.41%	$ 4,441,629	1.19%	$ 3,180,515	0.99%	54%	39.65%
Assets held-for-sale					$ 787,350	0.25%	-100%	-100.00%
Total current assets	$ 169,206,395	48.72%	$ 190,685,555	51.14%	$ 167,914,259	52.41%	1%	13.56%
Non-current assets								
Financial assets at fair value through other compreh	$ 8,827,034	2.54%	$ 12,206,843	3.27%	$ 10,652,836	3.32%	-17%	14.59%
Financial assets at fair value through profit or loss	$ 1,088,541	0.31%	$ 1,333,227	0.36%	$ 1,019,070	0.32%	7%	30.83%
Investment in associates and joint ventures	$ 8,437,348	2.43%	$ 7,807,235	2.09%	$ 6,842,078	2.14%	23%	14.11%
Property, plant and equipment	$ 130,151,868	37.47%	$ 131,045,055	35.14%	$ 109,239,795	34.09%	19%	19.96%
Intangible assets	$ 15,658,737	4.51%	$ 17,687,491	4.74%	$ 15,645,212	4.88%	0%	13.05%
Net defined benegit assets	$ 4,532,377	1.31%	$ 2,455,722	0.66%	$ 1,148,286	0.36%	295%	113.86%
Deferred income tax assets	$ 3,950,992	1.14%	$ 3,724,515	1.00%	$ 3,621,478	1.13%	9%	2.85%
Other non-current assets	$ 5,453,397	1.57%	$ 5,942,625	1.59%	$ 4,331,610	1.35%	26%	37.19%
Total non-current assets	$ 178,100,294	51.28%	$ 182,202,713	48.86%	$ 152,500,365	47.59%	17%	19.48%
Total assets	$ 347,306,689	100.00%	$ 372,888,268	100.00%	$ 320,414,624	100.00%	8%	16.38%
LIABILITIES								
Current liabilities				Common-Sizing		Common-Sizing		
Trade payables	$ 8,244,355	2.37%	$ 11,758,903	3.15%	$ 8,250,382	2.57%	-0.07%	42.53%
Short-term borrowing	$ 3,986,617	1.15%	$ 11,963,817	3.21%	$ 14,022,898	4.38%	-71.57%	-14.68%
Other paybales	$ 13,625,362	3.92%	$ 13,621,954	3.65%	$ 10,080,012	3.15%	35.17%	35.14%
Advances received	$ 1,018,422	0.29%	$ 1,070,547	0.29%	$ 970,322	0.30%	4.96%	10.33%
Withholdings	$ 1,005,496	0.29%	$ 1,131,066	0.30%	$ 825,545	0.26%	21.80%	37.01%
Accrued expenses	$ 22,624,421	6.51%	$ 24,410,498	6.55%	$ 20,610,947	6.43%	9.77%	18.43%
Current income tax liabilities	$ 3,291,951	0.95%	$ 5,899,094	1.58%	$ 3,753,014	1.17%	-12.29%	57.18%
Current portion of long-term liabilities	$ 843,561	0.24%	$ 1,162,459	0.31%	$ 606,629	0.19%	39.06%	91.63%
Provisions	$ 4,526,905	1.30%	$ 4,696,159	1.26%	$ 3,684,643	1.15%	22.86%	27.45%
Other current liabilities	$ 1,511,331	0.44%	$ 1,304,292	0.35%	$ 955,324	0.30%	58.20%	36.53%
Liabilities held-for-sale					$ 286,958	0.09%	-100.00%	-100.00%
Total current liabilities	$ 60,678,421	17.47%	$ 77,018,789	20.65%	$ 64,046,674	19.99%	-5.26%	20.25%
Non-current liabilities								
Debentures	$ 415,206	0.12%	$ 444,220	0.12%	$ 803,195	0.25%	-48.31%	-44.69%
Long-term borrowing	$ 2,757,756	0.79%	$ 2,505,164	0.67%	$ 1,694,018	0.53%	62.79%	47.88%
Long-term other payables	$ 2,132,446	0.61%	$ 2,614,668	0.70%	$ 1,425,643	0.44%	49.58%	83.40%
Net defined benefit liability	$ 207,854	0.06%	$ 407,206	0.11%	$ 393,456	0.12%	-47.17%	3.49%
Deferred income tax liabilities	$ 3,958,748	1.14%	$ 20,276,394	5.44%	$ 15,935,221	4.97%	-75.16%	27.24%
Long-term Provisions	$ 1,493,645	0.43%	$ 2,016,428	0.54%	$ 890,696	0.28%	67.69%	126.39%
Other non-current liabilities	$ 907,535	0.26%	$ 1,107,582	0.30%	$ 1,462,023	0.46%	-37.93%	-24.24%
Total non-current assets	$ 11,873,190	3.42%	$ 29,371,662	7.88%	$ 22,604,252	7.05%	-47.47%	29.94%
Total liabilities	$ 72,551,611	20.89%	$ 106,390,451	28.53%	$ 86,650,926	27.04%	-16.27%	22.78%
STOCKHOLDERS' EQUITY								
Equity attributable to owners of the Company		0.00%						
Preference shares	$ 92,528	0.03%	$ 104,420	0.03%	$ 101,204	0.03%	-8.57%	3.18%
Ordinary shares	$ 602,601	0.17%	$ 680,052	0.18%	$ 659,107	0.21%	-8.57%	3.18%
Share premium	$ 3,410,834	0.98%	$ 3,849,223	1.03%	$ 3,730,668	1.16%	-8.57%	3.18%
Retained earning	$ 261,740,930	75.36%	$ 256,153,287	68.69%	$ 229,629,870	71.67%	13.98%	11.55%
Other components of equity	$ 1,501,243	0.43%	$ (1,860,392)	-0.50%	$ (7,359,145)	-2.30%	-120.40%	-74.72%
Accumulated other comprehensive income attributable to assets held		0.00%			$ (10,277)	0.00%	-100.00%	-100.00%
Non-controlling interests	$ 7,406,942	2.13%	$ 7,571,227	2.03%	$ 7,012,271	2.19%	5.63%	7.97%
Total equity	$ 274,755,078	79.11%	$ 266,497,817	71.47%	$ 233,763,698	72.96%	17.54%	14.00%
Total liabilities and equity	$ 347,306,689	100.00%	$ 372,888,268	100.00%	$ 320,414,624	100.00%	8.39%	16.38%

Figure 5: Samsung Income Statement

INCOME STATEMENT: in millions, except per share data

	2022		2021		2020		2022-2020	2021-2020
		Common-Sizing		Common-Sizing		Common-Sizing	Horizontal	Horizontal
Revenue	$ 234,079,475		$ 244,388,604		$ 200,606,179		16.69%	21.83%
Cost of sales	$ 147,188,160	62.88%	$ 145,451,851	59.52%	$ 122,400,294	61.02%	20.25%	18.83%
Gross Profit	$ 86,891,315	37.12%	$ 98,936,753	40.48%	$ 78,205,885	38.98%	11.11%	26.51%
Selling and administrative expenses	$ 53,295,930	22.77%	$ 53,806,176	22.02%	$ 47,714,412	23.79%	11.70%	12.77%
Operating profit	33,595,385	14.35%	45,130,577	18.47%	30,491,473	15.20%	10.18%	48.01%
Other non-operating income	$ 1,519,632	0.65%	$ 1,927,888	0.79%	$ 1,172,483	0.58%	29.61%	64.43%
Other non-operating expense	$ 1,386,499	0.59%	$ 1,797,022	0.74%	$ 2,108,422	1.05%	-34.24%	-14.77%
Share of net profit of associated and joint ventures	$ 844,708	0.36%	$ 637,719	0.26%	$ 429,096	0.21%	96.86%	48.62%
Financial income	$ 16,132,145	6.89%	$ 7,467,173	3.06%	$ 10,392,246	5.18%	55.23%	-28.15%
Financial expense	$ 14,737,026	6.30%	$ 6,734,165	2.76%	$ 9,587,858	4.78%	53.71%	-29.76%
Profit before income tax	$ 35,968,345	15.37%	$ 46,632,170	19.08%	$ 30,789,018	15.35%	16.82%	51.46%
Income tax expense	$ (7,135,975)	-3.05%	11,751,059	4.81%	$ 8,418,167	4.20%	-184.77%	39.59%
Profit for the year	$ 43,104,320	18.41%	$ 34,881,111	14.27%	$ 22,370,851	11.15%	92.68%	55.92%
Profit attributable to								
Owners of the Company	$ 42,388,632	18.11%	$ 34,301,040	14.04%	$ 22,102,325	11.02%	91.78%	55.19%
Non-controlling interests	$ 715,688	0.31%	$ 580,071	0.24%	$ 268,528	0.13%	166.52%	116.02%

Figure 6: Samsung Statement of Cash Flow

	2022	Common-Sizing	2021	Common-Sizing	2020	Common-Sizing	2022-2020	2021-2020
Operating Activities								
Profit for the year	$ 43,104,320		$ 34,881,111		$ 22,370,853	100.00%	93%	56%
Adjustments	$ 25,615,519	59.43%	$ 42,877,081	122.92%	$ 35,256,304	157.60%	-27%	22%
Changes in assets and liabilities arising from operating activities	$ (13,165,758)	-30.54%	$ (14,235,553)	-40.81%	$ 103,708	0.46%	-12795%	-13827%
Cash generated from operations	$ 55,554,081	128.88%	$ 63,522,639	182.11%	$ 57,730,865	258.06%	-4%	10%
Interest received	$ 1,654,957	3.84%	$ 1,229,532	3.52%	$ 1,880,804	8.41%	-12%	-35%
Interest paid	$ (553,417)	-1.28%	$ (379,723)	-1.09%	$ (470,429)	-2.10%	18%	-19%
Dividends received	$ 410,039	0.95%	$ 261,370	0.75%	$ 206,417	0.92%	99%	27%
Income tax paid	$ (8,905,943)	-20.66%	$ (7,728,394)	-22.16%	$ (4,041,108)	-18.06%	120%	91%
Net cash from operating activities	$ 48,159,717	111.73%	$ 56,905,424	163.14%	$ 55,306,549	247.23%	-13%	3%
Investing Activities:								
Net decrease in short-term financial instruments	$ 11,783,556	27.34%	$ 9,542,117	27.36%	$ (17,255,702)	-77.13%	-168%	-155%
Net decrease (increase) in short-term financial assets at amortized cost	$ 2,362,319	5.48%	$ (294,519)	-0.84%	$ 155,960	0.70%	1415%	-289%
Net decrease in short-term financial assets at fair value through profit or loss	$ 9,044	0.02%	$ 26,828	0.08%	$ 1,443,942	6.45%	-99%	-98%
Disposal of long-term financial instruments	$ 6,407,403	14.86%	$ 8,929,368	25.60%	$ 10,321,680	46.14%	-38%	-13%
Acquisition of long-term financial instruments	$ (3,402,981)	-7.89%	$ (6,102,452)	-17.50%	$ (6,793,354)	-30.37%	-50%	-10%
Disposal of financial assets at amortized cost					$ 866,713	3.87%	-100%	-100%
Acquisition of financial assets at amortized cost								
Disposal of financial assets at fair value through other comprehensive income	$ 384,224	0.89%	$ 2,552,128	7.32%	$ 27,217	0.12%	1312%	9277%
Acquisition of financial assets at fair value through other comprehensive income	$ (29,189)	-0.07%	$ (979,986)	-2.81%	$ (207,968)	-0.93%	-86%	371%
Disposal of financial assets at fair value through profit or loss	$ 128,812	0.30%	$ 306,103	0.88%	$ 33,670	0.15%	283%	809%
Acquisition of financial assets at fair value through profit or loss	$ (122,561)	-0.28%	$ (182,031)	-0.52%	$ (71,315)	-0.32%	72%	155%
Disposal of investment in associates and joint ventures	$ 10,249	0.02%	$ 16,755	0.05%		0.00%		
Acquisition of investment in associates and joint ventures	$ (703,217)	-1.63%	$ (41,159)	-0.12%	$ (70,549)	-0.32%	897%	-42%
Disposal of property, plant and equipment	$ 168,747	0.39%	$ 313,158	0.90%	$ 319,151	1.43%	-47%	-2%
Acquisition of property, plant and equipment	$ (38,284,077)	-88.82%	$ (41,187,082)	-118.08%	$ (31,845,320)	-142.35%	20%	29%
Disposal of intangible assets	$ 18,171	0.04%	$ 1,531	0.00%	$ 5,953	0.03%	205%	-74%
Acquisition of intangible assets	$ (2,862,803)	-6.64%	$ (2,365,979)	-6.78%	$ (2,270,120)	-10.15%	26%	4%
Cash outflow from business combinations	$ (24,306)	-0.06%	$ (5,180)	-0.01%	$ (41,865)	-0.19%	-42%	-88%
Cash inflow from sale of assets-held-for-sale			$ 577,894	1.66%		0.00%		
Cash inflow (outflow) from other investing activities	$ (319,897)	-0.74%	$ 7,105	0.02%	$ (48,453)	-0.22%	560%	-115%
Net cash used in investing activities	$ (24,476,506)	-56.78%	$ (28,885,401)	-82.81%	$ (45,430,360)	-203.08%	-46%	-36%
Financing Acitivities:								
Net decrease in short-term borrowing	$ (6,458,706)	-14.98%	$ (2,287,339)	-6.56%	$ 1,856,218	8.30%	-448%	-223%
Increase in long-ter borrowings	$ 210,663	0.49%	$ 50,939	0.15%	$ 12,279	0.05%	1616%	315%
Repayment of debentures and long-term borrowings	$ (1,168,313)	-2.71%	$ (782,055)	-2.24%	$ (732,722)	-3.28%	59%	7%
Dividends paid	$ (7,601,315)	-17.63%	$ (17,927,074)	-51.39%	$ (8,197,469)	-36.64%	-7%	119%
Net decrease in non-controlling interests	$ (5)	0.00%	$ (23,835)	-0.07%	$ 6,935	0.03%	-100%	-444%
Net cash used in financing activities	$ (15,017,676)	-34.84%	$ (20,969,364)	-60.12%	$ (7,054,759)	-31.54%	113%	197%
Reclassification to assets held-for-sale		0.00%	$ 121	0.00%	$ (118)	0.00%	-100%	-203%
Effect of foreign exchange rate changes	$ (417,611)	-0.97%	$ 1,382,787	3.96%	$ (706,386)	-3.16%	-41%	-296%
Net increase in cash and cash equivalents	$ 8,247,924	19.13%	$ 8,433,567	24.18%	$ 2,114,926	9.45%	290%	299%
Cash and cash equivalents	$ 30,229,997	70.13%	$ 25,681,845	73.63%	$ 22,775,922	101.81%	33%	13%
Beginning of the year	$ 38,477,921	89.27%	$ 34,115,412	97.80%	$ 24,890,848	111.26%	55%	37%
End of the year								

Figure 7: Microsoft Balance Sheet

ASSETS	in millions, except per share data							
	2022	Common-Sizing	2021	Common-Sizing	2020	Common-Sizing	2022-2020	2021-2020
Current assets							Horizontal	Horizontal
Cash and cash equivalents	$ 13,931	3.82%	$ 14,224	4.26%	$ 13,576	4.51%	3%	4.77%
Short-Term Investments	$ 90,826	24.89%	$ 116,110	34.79%	$ 122,951	40.81%	-26%	-5.56%
Accounts receivable - net	$ 44,261	12.13%	$ 38,043	11.40%	$ 32,011	10.62%	38%	18.84%
Inventories	$ 3,742	1.03%	$ 2,636	0.79%	$ 1,895	0.63%	97%	39.10%
Other current assets	$ 16,924	4.64%	$ 13,393	4.01%	$ 11,482	3.81%	47%	16.64%
Total current assets	$ 169,684	46.51%	$ 184,406	55.25%	$ 181,915	60.37%	-7%	1.37%
Property, Plant, Equipment	$ 74,398	20.39%	$ 59,715	17.89%	$ 44,151	14.65%	69%	35.25%
Operating lease right-of-use assets	$ 13,148	3.60%	$ 11,088	3.32%	$ 8,753	2.90%	50%	26.68%
Equity Investments	$ 6,891	1.89%	$ 5,984	1.79%	$ 2,965	0.98%	132%	101.82%
Goodwill	$ 67,524	18.51%	$ 49,711	14.89%	$ 43,351	14.39%	56%	14.67%
Intangible Assets, net	$ 11,298	3.10%	$ 7,800	2.34%	$ 7,038	2.34%	61%	10.83%
Other Long-term assets	$ 21,897	6.00%	$ 15,075	4.52%	$ 13,138	4.36%	67%	14.74%
Total non-current assets	$ 195,156	53.49%	$ 149,373	44.75%	$ 119,396	39.63%	63%	25.11%
Total assets	$ 364,840	100.00%	$ 333,779	100.00%	$ 301,311	100.00%	21%	10.78%
LIABILITIES	2022	Common-Sizing	2021	Common-Sizing	2020	Common-Sizing	2022-2021	2021-2020
Current liabilities	Common-Sizing			Common-Sizing		Common-Sizing		
Accounts payable	$ 19,000	5.21%	$ 15,163	4.54%	$ 12,530	4.16%	51.64%	21.01%
Other current liabilities	$ 13,067	3.58%	$ 11,666	3.50%	$ 10,027	3.33%	30.32%	16.35%
Current Portion of Long term debt	$ 2,749	0.75%	$ 8,072	2.42%	$ 3,749	1.24%	-26.67%	115.31%
Accrued compensation	$ 10,661	2.92%	$ 10,057	3.01%	$ 7,874	2.61%	35.39%	27.72%
Short-term income taxes	$ 4,067	1.11%	$ 2,174	0.65%	$ 2,130	0.71%	90.94%	2.07%
Short-term unearned revenue	$ 45,538	12.48%	$ 41,525	12.44%	$ 36,000	11.95%	26.49%	15.35%
Total Current Liabilities	$ 95,082	26.06%	$ 88,657	26.56%	$ 72,310	24.00%	31.49%	22.61%
Long-term debt	$ 47,032	12.89%	$ 50,074	15.00%	$ 59,578	19.77%	-21.06%	-15.95%
Long-term income taxes	$ 26,069	7.15%	$ 27,190	8.15%	$ 29,432	9.77%	-11.43%	-7.62%
Long-term unearned revenue	$ 2,870	0.79%	$ 2,616	0.78%	$ 3,180	1.06%	-9.75%	-17.74%
Deffered Income taxes	$ 230	0.06%	$ 198	0.06%	$ 204	0.07%	12.75%	-2.94%
Operating Lease liabilities	$ 11,489	3.15%	$ 9,629	2.88%	$ 7,671	2.55%	49.77%	25.52%
Other Long-term liabilities	$ 15,526	4.26%	$ 13,427	4.02%	$ 10,632	3.53%	46.03%	26.29%
Total Liabilites	$ 198,298	54.35%	$ 191,791	57.46%	$ 183,007	60.74%	8.36%	4.80%
STOCKHOLDERS' EQUITY	2022	Common-Sizing	2021	Common-Sizing	2020	Common-Sizing	2022-2021	2021-2020
Common stock	$ 86,939	23.83%	$ 83,111	24.90%	$ 80,552	26.73%	7.93%	3.18%
Retained earnings	$ 84,281	23.10%	$ 57,055	17.09%	$ 34,566	11.47%	143.83%	65.06%
Accumulated other comprehensive income/(loss)	$ (4,678)	-1.28%	$ 1,822	0.55%	$ 3,186	1.06%	-246.83%	-42.81%
Total stockholders' (deficit) equity	$ 166,542	45.65%	$ 141,988	42.54%	$ 118,304	39.26%	40.77%	20.02%
Total liabilities and stockholders' equity	$ 364,840	100.00%	$ 333,779	100.00%	$ 301,311	100.00%	21.08%	10.78%

Figure 8: Microsoft Income Statement

INCOME STATEMENT: Microsoft			in millions, except per share data					
	2022		2021		2020		2022-2020	2021-2020
		Common-Sizing		Common-Sizing		Common-Sizing	Horizontal	Horizontal
Net sales	$ 198,270		$ 168,088		$ 143,015		38.64%	17.53%
Cost of goods sold	62,650	31.60%	52,232	31.07%	46,078	32.22%	35.97%	13.36%
Gross Profit	135,620	68.40%	115,856	68.93%	96,937	67.78%	39.91%	19.52%
Operating expenses:								
Selling, general, and administrative	27,725	13.98%	25,224	15.01%	24,709	17.28%	12.21%	2.08%
Research and Developement	24,512	12.36%	20,716	12.32%	19,269	13.47%	27.21%	7.51%
Total operating expenses	52,237	26.35%	45,940	27.33%	43,978	30.75%	18.78%	4.46%
Operating income	83,383	42.06%	69,916	41.59%	52,959	37.03%	57.45%	32.02%
Interest and other (income) expense:								
Interest and other, net	333	0.17%	1,186	0.71%	77	0.05%	332.47%	1440.26%
Earnings before provision for income taxes	83,716	42.22%	71,102	42.30%	53,036	37.08%	57.85%	34.06%
Provision for income taxes	10,978	5.54%	9,831	5.85%	8,755	6.12%	25.39%	12.29%
Net earnings (Net Income)	$ 72,738	36.69%	$ 61,271	36.45%	$ 44,281	30.96%	64.26%	38.37%
						0.00%		
Basic weighted average common shares	7,496	3.78%	7,547	4.49%	7,610	5.32%	-1.50%	-0.83%
Basic earnings per share	$ 9.70	0.00%	$ 8.12	0.00%	$ 5.82	0.00%	66.67%	39.52%
Diluted weighted average common shares	7,540	3.80%	7,608	4.53%	7,683	5.37%	-1.86%	-0.98%
Diluted earnings per share	$ 9.65	0.00%	$ 8.05	0.00%	$ 5.76	0.00%	67.53%	39.76%

Figure 9: Microsoft Statement of Cash Flow

MICROSOFT CASH FLOW	2022	Common-Sizing	2021	Common-Sizing	2020	Common-Sizing	2022-2020	2021-2020
Cash, cash equivalents and restricted cash, beginning balances	$ 14,224		$ 13,576		$ 11,356		25%	20%
Cash Flows from Operating Activities								
Net income	$ 72,738		$ 61,271		$ 44,281		64%	38%
Asjustments to recondile net income to cash generated by operating activities:								
Depreciation and amortization	$ 14,460	19.88%	$ 11,686	19.07%	$ 12,796	28.90%	13%	-9%
Share-based compensation expense	$ 7,502	10.31%	$ 6,118	9.99%	$ 5,289	11.94%	42%	16%
Net recognized gain on investments and derivatives	$ (409)	-0.56%	$ (1,249)	-2.04%	$ (219)	-0.49%	87%	470%
Deffered Income Taxes	$ (5,702)	-7.84%	$ (150)	-0.24%	$ 11	0.02%	-51936%	-1464%
Changes in operating assets and liabilities:								
Accounts receivable, net	$ (6,834)	-9.40%	$ 6,481	10.58%	$ (2,577)	-5.82%	165%	-351%
Inventories	$ (1,123)	-1.54%	$ (737)	-1.20%	$ 168	0.38%	-768%	-539%
Other current assets	$ (709)	-0.97%	$ (932)	-1.52%	$ (2,330)	-5.26%	-70%	-60%
Other long-term assets	$ (2,805)		$ (3,459)		$ (1,037)			
Account payable	$ 2,943	4.05%	$ 2,798	4.57%	$ 3,018	6.82%	-2%	-7%
Deferred revenue	$ 5,109	7.02%	$ 4,633	7.56%	$ 2,212	5.00%	131%	109%
Income Taxes	$ 696		$ (2,309)		$ (3,631)			
Other current and non-current liabilities	$ 3,169	4.36%	$ 5,551	9.06%	$ 2,694	6.08%	18%	106%
Cash generated by operating activities	$ 89,035	122.41%	$ 76,740	125.25%	$ 60,675	137.02%	47%	26%
Investing Activities:								
Additions to property and equipment	$ (23,886)	-32.84%	$ (20,622)	-33.66%	$ (15,441)	-34.87%	55%	34%
Acquisition of companies, net of cash acquired, and purchases of intangible and othe	$ (22,038)	-30.30%	$ (8,909)	-14.54%	$ (2,521)	-5.69%	774%	253%
Purchases of investments	$ (26,456)	-36.37%	$ (62,924)	-102.70%	$ (77,190)	-174.32%	-66%	-18%
Maturities of investments	$ 16,451	22.62%	$ 51,792	84.53%	$ 66,449	150.06%	-75%	-22%
Sales of investments	$ 28,443	39.10%	$ 14,008	22.86%	$ 17,721	40.02%	61%	-21%
Other	$ (2,825)	-3.88%	$ (922)	-1.50%	$ (1,241)	-2.80%	128%	-26%
Cash used in investing activities	$ (30,311)	-41.67%	$ (27,577)	-45.01%	$ (12,223)	-27.60%	148%	126%
Effect of Foreign Exchange rates on cash and cash equiv.	$ (141)		$ (29)		$ (201)			
Cash and Cash equiv.	$ (293)		$ 648		$ 2,220			
Cash and Cash equiv. beggining of period	$ 14,224		$ 13,576		$ 11,356			
Cash and Cash equiv. end of period	$ 13,576		$ 14,224		$ 13,576			
Financing Acitivities:								
Cash premium on debt exchange	$ -	0.00%	$ (1,754)	-2.86%	$ (3,417)	-7.72%	-100%	-49%
Repayments of debt	$ (9,023)	-12.40%	$ (3,750)	-6.12%	$ (5,518)	-12.46%	64%	-32%
Common stock issued	$ 1,841	2.53%	$ 1,693	2.76%	$ 1,343	3.03%	37%	26%
Common stock repurchased	$ (32,696)	-44.95%	$ (27,385)	-44.69%	$ (22,968)	-51.87%	42%	19%
Common stock cash dividends paid	$ (18,135)	-24.93%	$ (16,521)	-26.96%	$ (15,137)	-34.18%	20%	9%
Other, net	$ (863)	-1.19%	$ (769)	-1.26%	$ (334)	-0.75%	158%	130%
Net cash used in financing	$ (58,876)	-80.94%	$ (48,486)	-79.13%	$ (46,031)	-103.95%	28%	5%

Figure 10: Apple Financial Ratios

Ratios	Formulas	2022	2021	2020
1. Current Ratio	Current Assets / Current Liabilities	0.88	1.07	1.36
Industry Avg.		N/A	N/A	N/A
2. Quick Ratio	(Current Assets - Inventories) / Current Liabilities	0.85	1.02	1.33
Industry Avg.		0.43	1.15	1.48
3. Inventory Rurnover	Sales / Inventory	79.73	55.60	67.60
Industry Avg.		N/A	N/A	N/A
4. Days Sales Outstanding	Account Receivables / (Annual Sales / 365)	26.09	28.12	21.43
Industry Avg.		N/A	N/A	N/A
5. Days Payable outstanding	Account Payables / (COGS / 365)	104.69	93.85	91.05
Industry Avg.		N/A	N/A	N/A
6. Fixed Asset Turnover	Sales / Net Fixed Assets	N/A	N/A	N/A
Industry Avg.		N/A	N/A	N/A
7. Total Asset Turnover	Sales / Total Assets	111.79%	104.22%	84.76%
Industry Avg.		N/A	N/A	N/A
8. Debt Ratio	Total Debt / Total Assets	31.21%	33.82%	33.17%
Industry Avg.		N/A	N/A	N/A
9. TIE (Timrs-Interest-Earned)	EBIT / Interest Charges	40.64	41.29	23.35
Industry Avg.		N/A	N/A	N/A
10. Operating Profit Margin	EBIT / Sales	30.20%	29.85%	24.44%
Industry Avg.		16.90%	18.40%	14.20%
11. Profit Margin	Net Income / Sales	25.31%	25.88%	20.91%
Industry Avg.		23.66%	24.51%	19.00%
12. ROA (Return on Total Assets)	Net Income / Total Assets	28.29%	26.97%	17.73%
Industry Avg.		25.11	23.96	15.21
13. ROE (Return on Common Equity)	Net Income / (Common Stock + Retained Earnings)	161.54%	150.46%	87.32%
Industry Avg.		154.89	117.01	70.62
14. ROIC (Return on Invested Capital)	Net Operating Profit after Tax (NOPAT) / Total Invested Capital	N/A	N/A	N/A
Industry Avg.		54.36	45.54	28.02
15. BEP (Basic Earning power)	EBIT / Total Assets	0.34	0.31	0.21
Industry Avg.		N/A	N/A	N/A
16. P/E Ratio	Price per Share / Earning per Share	66.83	70.55	91.54
Industry Avg.		21.22	30.19	39.44
17. Market/Book Ratio	Market Price per Share / Book Value per Share	55.85	32.04	16.39
Industry Avg.		N/A	N/A	N/A
18. EPS	(Net Income - Preferred Dividends) / (Common Shares Outstanding)	N/A	N/A	N/A
Industry Avg.		N/A	N/A	N/A
19. Dividend Yield	Annual Dividends / Price per Share	-36.11	-36.17	-46.47
Industry Avg.		0.72	0.55	0.69
20. DuPont Formula	(Net Income / Sales) * (Sales/Total Assets) * (Total Assets / Total Equity)	1.97	1.50	0.88
Industry Avg.		N/A	N/A	N/A

Figure 11: Samsung Financial Ratios

Ratios	Formulas	2022	2021	2020
1. Current Ratio	Current Assets / Current Liabilities	2.79	2.48	2.62
Industry Avg.		N/A	N/A	N/A
2. Quick Ratio	(Current Assets - Inventories) / Current Liabilities	2.12	2.48	2.20
Industry Avg.		0.43	1.15	1.48
3. Inventory Rurnover	Sales / Inventory	5.79	6.76	7.39
Industry Avg.		N/A	N/A	N/A
4. Days Sales Outstanding	Account Receivables / (Annual Sales / 365)	50.57	59.02	53.28
Industry Avg.		N/A	N/A	N/A
5. Days Payable outstanding	Account Payables / (COGS / 365)	64.12	93.71	96.48
Industry Avg.		N/A	N/A	N/A
6. Fixed Asset Turnover	Sales / Net Fixed Assets	N/A	N/A	N/A
Industry Avg.		N/A	N/A	N/A
7. Total Asset Turnover	Sales / Total Assets	67.40%	65.54%	62.61%
Industry Avg.		N/A	N/A	N/A
8. Debt Ratio	Total Debt / Total Assets	N/A	N/A	N/A
Industry Avg.		N/A	N/A	N/A
9. TIE (Timrs-Interest-Earned)	EBIT / Interest Charges	-504.04%	396.83%	365.74%
Industry Avg.		N/A	N/A	N/A
10. Operating Profit Margin	EBIT / Sales	15.37%	19.08%	15.35%
Industry Avg.		16.90%	18.40%	14.20%
11. Profit Margin	Net Income / Sales	18.41%	14.27%	11.15%
Industry Avg.		23.66%	24.51%	19.00%
12. ROA (Return on Total Assets)	Net Income / Total Assets	12.41%	9.35%	6.98%
Industry Avg.		25.11	23.96	15.21
13. ROE (Return on Common Equity)	Net Income / (Common Stock + Retained Earnings)	16.43%	13.58%	9.71%
Industry Avg.		154.89	117.01	70.62
14. ROIC (Return on Invested Capital)	Net Operating Profit after Tax (NOPAT) / Total Invested Capital	N/A	N/A	N/A
Industry Avg.		54.36	45.54	28.02
15. BEP (Basic Earning power)	EBIT / Total Assets	0.10	0.13	0.10
Industry Avg.		N/A	N/A	N/A
16. P/E Ratio	Price per Share / Earning per Share	6.74	11.73	17.88
Industry Avg.		21.22	30.19	39.44
17. Market/Book Ratio	Market Price per Share / Book Value per Share	N/A	N/A	N/A
Industry Avg.		N/A	N/A	N/A
18. EPS	(Net Income - Preferred Dividends) / (Common Shares Outstanding)	N/A	N/A	N/A
Industry Avg.		N/A	N/A	N/A
19. Dividend Yield	Annual Dividends / Price per Share	N/A	N/A	N/A
Industry Avg.		0.72	0.55	0.69
20. DuPont Formula	(Net Income / Sales) * (Sales/Total Assets) * (Total Assets / Total Equity)	0.16	0.13	0.10
Industry Avg.		N/A	N/A	N/A

Figure 12: Microsoft Financial Ratios

Ratios	Formulas	2022	2021	2020
1. Current Ratio	Current Assets / Current Liabilities	1.78	2.08	2.52
Industry Avg.		N/A	N/A	N/A
2. Quick Ratio	(Current Assets - Inventories) / Current Liabilities	1.75	2.05	2.49
Industry Avg.		0.43	1.15	1.48
3. Inventory Rurnover	Sales / Inventory	52.99	63.77	75.47
Industry Avg.		N/A	N/A	N/A
4. Days Sales Outstanding	Account Receivables / (Annual Sales / 365)	81.48	82.61	81.70
Industry Avg.		N/A	N/A	N/A
5. Days Payable outstanding	Account Payables / (COGS / 365)	110.69	105.96	99.25
Industry Avg.		N/A	N/A	N/A
6. Fixed Asset Turnover	Sales / Net Fixed Assets	N/A	N/A	N/A
Industry Avg.		N/A	N/A	N/A
7. Total Asset Turnover	Sales / Total Assets	54.34%	50.36%	47.46%
Industry Avg.		N/A	N/A	N/A
8. Debt Ratio	Total Debt / Total Assets	13.64%	17.42%	21.02%
Industry Avg.		N/A	N/A	N/A
9. TIE (Timrs-Interest-Earned)	EBIT / Interest Charges	251.40	59.95	688.78
Industry Avg.		N/A	N/A	N/A
10. Operating Profit Margin	EBIT / Sales	42.22%	42.30%	37.08%
Industry Avg.		16.90%	18.40%	14.20%
11. Profit Margin	Net Income / Sales	36.69%	36.45%	0.31
Industry Avg.		23.66%	24.51%	19.00%
12. ROA (Return on Total Assets)	Net Income / Total Assets	19.94%	18.36%	14.70%
Industry Avg.		25.11	23.96	15.21
13. ROE (Return on Common Equity)	Net Income / (Common Stock + Retained Earnings)	42.48%	43.71%	38.47%
Industry Avg.		154.89	117.01	70.62
14. ROIC (Return on Invested Capital)	Net Operating Profit after Tax (NOPAT) / Total Invested Capital	N/A	N/A	N/A
Industry Avg.		54.36	45.54	28.02
15. BEP (Basic Earning power)	EBIT / Total Assets	0.23	0.21	0.18
Industry Avg.		N/A	N/A	N/A
16. P/E Ratio	Price per Share / Earning per Share	41.23	51.71	53.77
Industry Avg.		21.22	30.19	39.44
17. Market/Book Ratio	Market Price per Share / Book Value per Share	N/A	N/A	N/A
Industry Avg.		N/A	N/A	N/A
18. EPS	(Net Income - Preferred Dividends) / (Common Shares Outstanding)	N/A	N/A	N/A
Industry Avg.		N/A	N/A	N/A
19. Dividend Yield	Annual Dividends / Price per Share	45.58	39.69	48.88
Industry Avg.		0.72	0.55	0.69
20. DuPont Formula	(Net Income / Sales) * (Sales/Total Assets) * (Total Assets / Total Equity)	0.44	0.43	0.37
Industry Avg.		N/A	N/A	N/A

Figure 13: Financial Ratios Comparison

Ratios	Formulas	Company	2022	2021	2020
Quick Ratio	(Current Assets - Inventories) / Current Liabilities	Apple	0.85	1.02	1.33
		Samsung	2.12	2.48	2.20
		Microsoft	1.75	2.05	2.49
Industry Avg.			0.43	1.15	1.48
Operating Profit Margin	EBIT / Sales	Apple	30.20%	29.85%	24.44%
		Samsung	15.37%	19.08%	15.35%
		Microsoft	42.22%	42.30%	37.08%
Industry Avg.			16.90%	18.40%	14.20%
P/E Ratio	Price per Share / Earning per Share	Apple	66.83	70.55	91.54
		Samsung	6.74	11.73	17.88
		Microsoft	41.23	51.71	53.77
Industry Avg.			21.22	30.19	39.44
ROA (Return on Total Assets)	Net Income / Total Assets	Apple	28.29%	26.97%	17.73%
		Samsung	12.41%	9.35%	6.98%
		Microsoft	19.94%	18.36%	14.70%
Industry Avg.			25.11	23.96	15.21
ROE (Return on Common Equity)	Net Income / (Common Stock + Retained Earnings)	Apple	161.54%	150.46%	87.32%
		Samsung	16.43%	13.58%	9.71%
		Microsoft	42.48%	43.71%	38.47%
Industry Avg.			154.89	117.01	70.62